## U.S. ARMY CORPS OF ENGINEERS CIVIL WORKS PROGRAM

CONGRESSIONAL SUBMISSION FISCAL YEAR 2005

NORTH ATLANTIC DIVISION

Budgetary information will not be released Outside the Department of the Army until 2 February 2004

# JUSTIFICATION OF ESTIMATE FOR CIVIL FUNCTIONS ACTIVITIES DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS

## FISCAL YEAR 2005

## NORTH ATLANTIC DIVISION

## CORPS OF ENGINEERS

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## JUSTIFICATION OF ESTIMATE FOR CIVIL FUNCTION ACTIVITIES DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS

## FISCAL YEAR 2005

## **SUMMARY, NORTH ATLANTIC DIVISION**

	FY 2004 Allocation \$	FY 2005 <u>Request</u> \$	Increase or <u>Decrease</u> \$
General Investigations			
Surveys Preconstruction Engineering and Design	7,744,000 2,460,000	6,606,000 385,000	-1,138,000 -2,075,000
Subtotal General Investigations	(10,204,000)	(6,991,000)	(-3,213,000)
Construction, General			
Construction	193,162,000	178,669,000	-14,493,000
Major Rehabilitation	7,646,000	0	-7,646,000
Dam Safety Assurance	0	3,640,000	3,640,000
Subtotal Construction, General	(200,808,000)	(182,309,000)	(-18,499,000)
Operation and Maintenance, General			
Project Operation and Maintenance	207,663,000	191,784,000	-15,879,000
Subtotal Operation and Maintenance	(207,663,000)	(191,784,000)	(-15,879,000)
GRAND TOTAL, NORTH ATLANTIC DIVISION	418,675,000	381,084,000	-37,591,000

North Atlantic Division

0

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2004	FY 2004	FY 2005	After FY 2005
·	\$	\$	\$	\$	\$

#### 1. SURVEYS - NEW

a. Navigation Studies: None

b. Flood Damages Prevention Studies: None

c. Shoreline Prevention Studies: None

d. Special Studies: None

e. Ecosystem Restoration Studies: The amount of \$100,000 is requested in fiscal year 2005 for one ecosystem restoration study.

#### DELAWARE

Chesapeake and Delaware Canal. 100.000 Environmental Restoration, DE and MD Philadelphia District

The study area is located along the 44-mile-long Federal navigation project for the Chesapeake and Delaware Canal. The canal, located on the Delmarva Peninsula, connects the Delaware Bay to the Chesapeake Bay. A private company built the Chesapeake and Delaware Canal in the mid-19<sup>th</sup> century. In 1919, the

0

0

100.000

Federal government purchased the canal and converted it from a locked canal to a sea level canal. To maintain the canal, some two million cubic yards of material is dredged annually. The Federal government also owns some 8,800 acres of land along the canal for which it reserves 5,000 acres for disposal of dredged material. Since the first construction of the canal, the dredging of the canal to a sea level canal, the subsequent expansion of the canal in the 1960's, and today's maintenance dredging, over 2 million acres of wetlands have been lost in the upper Chesapeake and Delaware Bay estuaries. The lost of these wetlands has affected the ecosystem and the fish and wildlife habitats. As a result of the degraded ecosystem, oyster harvesting has decreased from 25 million to 1 million tons and commercial harvest of anadromous fish in the Chesapeake Bay has declined by 82 percent, over the last 30 years. Scientific and estuarine research in the 1970's identified three key areas as requiring immediate attention, (1) nutrient over-enrichment, (2) toxic pollution, and (3) dwindling underwater grasses. The area's State and local environmental agencies have several recovery initiatives underway to increase bay grasses, reduce toxic releases, protect bay bottom reef habitat, re-forest streamside habitat, re-establish spawning habitat, and reduce nitrogen and phosphorous into the Upper Chesapeake and Delaware Bays.

The reconnaissance study will determine if there a Federal interest for further feasibility level studies for ecosystem restoration measures for restoring the habitat in the upper Chesapeake and Delaware Bays, examine the hydraulic and salinity effects that results from the tidal flow mixing of the Chesapeake and Delaware Bay

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2004	FY 2004	FY 2005	After FY 2005
·	\$	\$	\$	\$	\$

Chesapeake and Delaware Canal, Environmental Restoration, DE and MD Philadelphia District

estuaries waters, and the effect of disposing dredged materials from the Chesapeake and Delaware Canal along side the Chesapeake Bay. In a letter dated July 16 1997, the Maryland Port Administration indicated their interest as the potential study sponsor and a willingness to cost-share the feasibility phase of the study. Another potential sponsor is the Delaware Department of Natural Resources and Environmental Control, who has also shown an interest for the study.

Fiscal year 2005 funds will be used to initiate and complete the reconnaissance phase of the study at full Federal expense. The reconnaissance phase is scheduled for completion in September 2005, which is 12 months after initiating the study.

Subtotal Ecosystem Restoration Studies - New	100,000	0	0	100,000	0
f. Watershed/Comprehensive Studies: None					
TOTAL SURVEYS - NEW	100,000	0	0	100,000	0

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2004	FY 2004	FY 2005	After FY 2005
•	\$	\$	\$	\$	\$

#### 2. SURVEYS - CONTINUING

a. Navigation Studies: The amount of \$950,000 is requested in fiscal year 2005 for two navigation studies.

#### MASSACHUSETTS

Boston Harbor 2,366,000 810,000 325,000 650,000 581,000 New England District

Boston Harbor is located along the eastern shoreline of Massachusetts and is New England's largest port serving as the principal distribution point for the commerce of Massachusetts, New Hampshire and Vermont. In 2001, waterborne commerce totaled 20.6 million tons, of which approximately 72 percent were liquid petroleum products. The inner harbor comprised of the Main Ship, Reserved, Chelsea River and Mystic River Channels. The Massachusetts Port Authority (Massport) has been upgrading facilities at Conley Terminal, which is located along the southerly side of the Reserved Channel. In addition, Massport has plans to expand Conley Terminal onto the adjacent Coastal Oil Terminal property and to develop a bulk cargo terminal at nearby North Jetty Terminal, increasing the number of berths that would benefit from deeper channels. The Port of Boston Competitiveness Task Force Report, dated December 1998, concluded that the channels accessing Conley Terminal must be dredged to at least 45 feet for New England companies to remain competitive by receiving containerized cargo by direct ocean going service. Ships drawing 45-foot drafts now make 3 calls a week to Boston Harbor. Navigation improvements to deepen portions of Boston Harbor to at least 45 feet would increase the efficiency of harbor operations and reduce tidal delays for larger vessels. A feasibility cost-sharing agreement (FCSA) was executed with Massport on 27 June 2002. Massport has requested an amendment to the FCSA to investigate deepening the Chelsea River Channel to 40 feet. The reconnaissance report, certified in August 2001, recommended studies to deepening the Main Ship, Reserved, and Entrance Channels to 45 feet.

Fiscal Year 2004 funds are being used to continue the feasibility phase, including initiation of channel design efforts, and completion of the biological sampling and testing, environmental resource surveys and economic analysis. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase, including disposal site investigations and completion of channel design and ship simulation. The estimated cost of the feasibility phase is \$4,564,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$4,648,000
Reconnaissance Phase (Federal)	84,000
Feasibility Phase (Federal)	2,282,000
Feasibility Phase (Non-Federal)	2,282,000

The reconnaissance phase was completed in June 2002. The feasibility study schedule is being determined.

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
NEW YORK					
Lake Montauk Harbor	1,450,000	605,000	55,000	300,000	490,000

Lake Montauk Harbor, located about 120 miles east of the Battery New York City, is on the south fork of Long Island in the Town of East Hampton, Suffolk County, New York. It is the only harbor of refuge for nearly 50 miles in this area. The existing Federal project provides a channel 12-foot deep at mean low water, 150 feet wide for an approximate length of 3700 feet; a boat basin 10 feet deep, 400 feet wide for an approximate length of 900 feet; and two jetties with sport fishing facilities. Local interests maintain that the authorized 12-foot project is inadequate for current commercial vessels forcing some deeper draft vessels to wait for higher tides in order to pass safely through the channel. In addition, deterioration of the eastern jetty is allowing sand to migrate into the authorized channel increasing Federal maintenance costs.

The Section 905 (b) analysis was certified to be in accord with policy in November 2002, which determined that there is federal interest to deepen the existing channel and provide shoreline protection through beneficial use of dredged material and sand bypassing. In addition, environmental restoration opportunities at two sites were identified for further evaluation. The feasibility phase of study is evaluating potential plans to determine the national economic development plan for the project. The New York State Department of Environmental Conservation executed a feasibility cost-sharing agreement in March 2003.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study, including data collection and coordination with local interests. The funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study, including economic, hydraulic, and environmental analyses to establish baseline conditions. The estimated cost of the feasibility phase is \$2,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost \$2,450,000 Reconnaissance Phase (Federal) 450,000 Feasibility Phase (Federal) 1,000,000 Feasibility Phase (non-Federal) 1,000,000

The reconnaissance phase was completed in March 2003. The feasibility study is scheduled is being determined.

 Subtotal Navigation Studies – Continuing
 3,816,000
 1,415,000
 380,000
 950,000
 1,071,000

North Atlantic Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2004	FY 2004	FY 2005	After FY 2005
•	\$	\$	\$	\$	\$

#### 2. SURVEYS - CONTINUING

b. Flood Damage Prevention Studies: The amount of \$935,000 is requested in fiscal year 2005 for nine flood damage prevention studies.

#### MARYLAND

Anacostia River and Tributaries, Prince George's County Levee, MD & DC Baltimore District

1,453,000

Planning Commission. The feasibility cost-sharing agreement was executed in January 1999.

1.047.000

126,000

100,000

180.000

The Anacostia River has a total drainage area of 170 square miles, of which 136 square miles are in Maryland, and 34 square miles are in the District of Columbia. The Northeast and Northwest Branches originate in Maryland and flow through several highly urbanized areas before forming the Anacostia River about nine miles upstream from its junction with the Potomac River. The Corps of Engineers' involvement in the basin dates back more than 115 years and includes projects and programs for navigation, flood control, debris removal, and aquatic vegetation control. Two major projects were undertaken. From 1902 through 1940, the District of Columbia portion of the river was channelized, seawalls were built, Kingman Lake and East Lake were constructed, and more than 1,000 acres of mudflats and wetlands were filled with dredged material. The primary purpose of this work was to provide a park for the eastern portion of the city. From 1952 to 1959, a flood control project was constructed in Prince George's County, Maryland, along the Northeast and Northwest Branches, and the Anacostia River. A total of 28,000 feet of levees and 14,000 feet of channels were constructed to solve critical flood problems. This effort was successful; however, the construction resulted in a further loss of wetlands and fish and wildlife habitat. A reconnaissance study for the Anacostia River and Tributaries, completed in December 1991, identified extensive potential Federal involvement in the Anacostia watershed restoration effort. This reconnaissance study recommended that additional feasibility studies be conducted at numerous sites in the Anacostia area. Prince George's County and restoring the environment through wetland creation and restoration. According to a recent County study, the levees do not currently provide 100-year level of protection under existing conditions nor do they have the required 3-foot freeboard above the 100-year flood elevation. The non-Federal sponsors for this third study are Prince George's County and the Marylan

Fiscal Year 2004 funds are being used to continue the feasibility phase, including plan formulation, economic and environmental analyses, and public coordination. The funds requested for fiscal year 2005 will be used to continue the feasibility phase, including final plan formulation. The estimated cost of the feasibility phase is

North Atlantic Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2004	FY 2004	FY 2005	After FY 2005
-	\$	\$	\$	\$	\$

Anacostia River and Tributaries, Prince George's County Levee, MD & DC Baltimore District

\$2,706,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,806,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,353,000
Feasibility Phase (Non-Federal)	1,353,000

The reconnaissance phase for the Prince George's County Levee area was completed in January 1999. The Prince George's County Levee feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
NEW JERSEY					
Goffle Brook, Borough of Hawthorne New York District	1,100,000	100,000	33,000	25,000	942,000

The study area encompasses Goffle Brook and its secondary tributaries that empty into the Passaic River. The study will focus on the flooding problems in the Boroughs of Hawthorne, Passaic County, and Wedland Park, Bergen County, New Jersey, which are suburban in nature with many residential homes and some commercial development. Many of the residences and commercial properties located in the study area are on the 100-year floodplain and experience severe flooding from hurricanes and nor'easters, along with flooding from back-up floods from the Passaic River. In addition, the ecosystem along Goffle Brook has suffered environmental degradation from over development and streambank erosion.

A reconnaissance report, completed in March 2003, determined that there is Federal interest to proceed to the feasibility phase of study. The Section 905 (b) analysis was certified to be in accord with policy in April 2003. The feasibility study will evaluate alternatives for flood damage reduction measures within the Borough of Hawthorne, as well as opportunities for ecosystem restoration at several sites also within the borough. Passaic County and the Borough of Hawthorne are the potential local sponsors, who fully understand the cost-sharing requirements for the feasibility phase of the study. The feasibility cost-sharing agreement is scheduled for execution in August 2004.

Fiscal year 2004 funds will be used to initiate the feasibility phase of the study. Fiscal Year 2005 funds will be used to continue the feasibility phase of the study, including data collection and local coordination. The preliminary estimated cost of the feasibility phase is \$2,000,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the cost sharing is as follows:

Total Estimated Study Cost	\$2,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (Non-Federal)	1,000,000

The reconnaissance phase is scheduled for completion in August 2004. The feasibility study scheduled is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
Rahway River Basin New York District	3,280,000	373,000	97,000	100,000	2,710,000

The Rahway River basin study area encompasses an 81.9 square mile area in northeastern New Jersey about 15 miles west of the Battery New York City. The Rahway River flows southerly through Essex and Union Counties, then easterly through Union and Middlesex Counties from the City of Rahway discharging into the Arthur Kill near Carteret, New Jersey. The area is urban to suburban in nature.

Frequent flooding occurs along the Rahway River in Essex, Union, and Middlesex Counties. Flooding problems from fluvial and tidal storm surges have worsened due to extensive development in the area. Major storms of record occurred in July 1938, May 1968 (10 year flood), August 1971 (15 year flood), August 1973 (60 year flood), July 1975 (50 year flood), June 1992 (15 year flood), October 1996 (75 year flood), July 1997 (50 year flood), and most recently September 1999 Hurricane Floyd (500 year flood). Major damage centers include Springfield, Cranford, Rahway, Maplewood, and Millburn. In addition to the flooding problems, ecologic problems exist that include loss and degradation of tidal wetlands, pollution and sedimentation problems. Many denuded mud flats exist where phragmites has replaced spartina as the dominant plant. Numerous petroleum facilities align the Rahway River in the vicinity of its confluence with the Arthur Kill. Past sediment analyses have shown that petroleum products and heavy metals are prevalent downstream of the river.

The reconnaissance study, completed in July 1999, found there is a Federal interest to proceed to the feasibility phase of the study. The feasibility study is evaluating flood damage reduction measures, such as channel improvements, diversion tunnels and detention ponds along the South Branch of the Rahway River, and levees and floodwalls along the Robinson's Branch of the Rahway River. In addition, the feasibility study is evaluating ecosystem restoration for wetlands along the Rahway River in the City of Rahway and the Town of Cranford. The feasibility cost sharing agreement was executed in March 2002 with the New Jersey Department of Environmental Protection.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study, including data collection and local coordination. The funds requested for fiscal year 2005 will be used to continue the feasibility phase of the study, including economic, hydraulic, and environmental analyses necessary to establish baseline conditions and formulate alternatives. The estimated cost of the feasibility phase is \$6,400,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$6,480,000
Reconnaissance Phase (Federal)	80,000
Feasibility Phase (Federal)	3,200,000
Feasibility Phase (Non-Federal)	3,200,000

The reconnaissance phase was completed in March 2002. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
Shrewsbury River and Tributaries New York District	1,900,000	514,000	97,000	100,000	1,189,000

The Shrewsbury River and its tributaries, located in northern Monmouth County, New Jersey, drain into the Raritan and Sandy Hook Bays about 35 miles southwest of the battery New York City. The tidal estuary is protected by the Sandy Hook peninsula and nearby barrier beaches. This area is urban to suburban in nature with several heavily populated towns.

Frequent storms, hurricanes, and northeasters produce storm surges that back up the normal river flow causing damages to residential, commercial, and municipal buildings. Monmouth Beach and Seabright, New Jersey, are major damage centers, where buildings sustained serious damages from flooding caused by storms in December 1992 and October 1996. Some buildings were flooded to the first floor levels and above. Furthermore, the ecological productivity of the coastline and riverine wetlands are degrading along the Shrewsbury River and its tributaries due to development, streambank erosion, and dredging activities.

The reconnaissance study, completed in August 2001, found there was Federal interest to proceed to the feasibility study. The feasibility phase is evaluating potential flood control measures in Sea Bright and Monmouth Beach, New Jersey, as well as opportunities for environmental restoration to protect coastline and riverine wetlands along the islands in the Shrewsbury River, the Navesink delta, and Little Silver Creek. The feasibility cost-sharing agreement was executed in August 2001 with the New Jersey Department of Environmental Protection.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study, including economic, hydraulic, and environmental analyses. The funds requested for fiscal year 2005 will be used to continue the feasibility phase of the study, including additional data gathering and analysis, plan formulation, and environmental analyses. The estimated cost of the feasibility phase is \$3,600,000, which is being cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$3,700,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,800,000
Feasibility Phase (Non-Federal)	1,800,000

The reconnaissance phase was completed in August 2001. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
Woodbridge River Basin New York District	1,730,000	141,000	114,000	100,000	1,375,000

The study area encompasses the Woodbridge River Basin located in northeastern New Jersey about 18 miles southwest of the Battery New York City. The 5 miles long Woodbridge River flow easterly through Middlesex County, New Jersey, and discharges into the Arthur Kill. The area is entirely developed and is suburban and industrial in nature.

Frequent flooding occurs along the Woodbridge River in Middlesex County. Flooding problems from fluvial and tidal storm surges have worsened due to extensive development in the area. Major storms of record occurred in July 1938, May 1968 (10 year flood), August 1971 (15 year flood), August 1973 (60 year flood), July 1975 (50 year flood), July 1997 (50 year flood), and most recently September 1999 Hurricane Floyd (500 year flood). Major damage centers includes the Sewaren section of Woodbridge Township and Perth Amboy. In addition to the flooding problems, ecologic problems exist that include loss and degradation of tidal wetlands, pollution and sedimentation problems. Many denuded mud flats exist where phragmites has replaced spartina as the dominant plant. Petroleum facilities align the Woodbridge River in the vicinity of its confluence with the Arthur Kill. Past sediment analyses have shown that petroleum products and heavy metals are prevalent downstream of the river.

The reconnaissance study, certified in July 1999, found there is a Federal interest to proceed to the feasibility phase of the study. The feasibility study is evaluating flood damage reduction measures for non-structural solutions, such as buyouts, and structural measures, such as levees, floodwalls, streambank modifications and tidal gates in the Township of Woodbridge. Ecosystem restoration, such as streambank stabilization and wetlands creation along the Woodbridge River, are also being evaluated. The feasibility cost-sharing agreement was executed in March 2002 with the New Jersey Department of Environmental Protection.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study, including data collection, plan formulation, environmental studies and local coordination. The funds requested for fiscal year 2005 will be used to continue the feasibility phase of the study, including economic, hydraulic, and environmental analyses to the formulated alternatives. The estimated cost of the feasibility phase is \$3,300,000, which is being cost-shared on a 50-50 percent basis by Federal and non-Federal interest. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$3,380,000
Reconnaissance Phase (Federal)	80,000
Feasibility Phase (Federal)	1,650,000
Feasibility Phase (Non-Federal)	1,650,000

The reconnaissance phase was completed in March 2002. The feasibility study schedule is being determined.

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
NEW YORK					
Bronx River Basin New York District	2,350,000	224,000	33,000	50,000	2,043,000

The study area for the Bronx River Basin is located in central Bronx County and lower Westchester County, New York. The Bronx River drains an approximate 56.4 square mile area. The river and its tributaries carry large amounts of sediment that are deposited in the lower reaches at river bends and bridges which leads to flooding during storms that produce high flow events. Major damage centers include the Towns of North Castle, Scarsdale, Mount Pleasant, and Greenburgh; and the Cities of Yonkers, White Plains, and Mount Vernon. In addition to flooding problems, environmental degradation of the Bronx River affects the water quality and fish and wildlife habitats of the watershed.

The reconnaissance study, certified in January 2001, found there is a Federal interest to proceed to the feasibility phase and recommended further studies for potential flood damage prevention measures, ecosystem restoration opportunities for 18 sites along the Bronx River. The reconnaissance study also recommended that a comprehensive basin-wide watershed analysis be undertaken to identify non-structural measures for ecosystem restoration. The local sponsors are the New York City Department of Environmental Protection and the Westchester County Department of Parks, Recreation, and Conservation. The feasibility cost-sharing agreement was executed in November 2003.

The Fiscal Year 2004 funds are being used to initiate the feasibility study, including data collection and coordination with local interests. The funds requested for fiscal year 2005 will be used to continue the feasibility phase of the study, including formulation of alternatives. The estimated cost of the feasibility study is \$4,500,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$4,600,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	2,250,000
Feasibility Phase (Non-Federal)	2,250,000

The reconnaissance phase was completed in November 2003. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
PENNSYLVANIA					
Unami Creek Philadelphia District	825,000	69,000	41,000	10,000	705,000

The study area is located in southeastern Pennsylvania in Bucks and Montgomery Counties. The 20-mile long Unami Creek is a tributary of the Perkiomen Creek, which then flows into the Schuylkill River. The area is predominantly rural area but is being encroached by sub-urban sprawl that is threatening the delicate ecosystems along the creek.

The Section 905 (b) analysis is scheduled for certification in July of 2004. After certification of the Section 905 (b) analysis, which will determine if there is a Federal interest for further feasibility level studies, the feasibility phase of the study will evaluate acquisition of floodplain obstructions, the elimination of point and non-point source pollution sources, preservation of open space through parkland acquisition, protection of the natural environment for some endangered species, and promote a more effective storm water management practice. The potential study sponsors are Bucks and Montgomery Counties, Pennsylvania, and the Pennsylvania Department of Environmental Protection, who fully understand the cost-sharing requirements for the feasibility phase of the study. The feasibility cost-sharing agreement is scheduled for completion in August 2004.

Fiscal Year 2004 funds will be used to complete the reconnaissance phase at full Federal expense, including final coordination of the project management plan and execution of the feasibility cost-sharing agreement with the potential study sponsor, and the initiation of the feasibility study. The funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study, including data collection, formulation of plan alternatives, and coordination with local interests. The preliminary estimated cost of the feasibility phase is \$1,450,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1	,550,000
Reconnaissance Phase (Federal)	\$	100,000
Feasibility Phase (Federal)	\$	725,000
Feasibility Phase (Non-Federal)	\$	725,000

The reconnaissance phase completion schedule is scheduled for completion August 2004. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
VIRGINIA					
Dismal Swamp and Dismal Swamp Canal Norfolk District	700,000	69,000	65,000	100,000	466,000

The Dismal Swamp and Dismal Swamp Canal are located in Chesapeake, Virginia. The swamp is maintained by fixed weirs across drainage ditches to restrict the flow of water out of the swamp and inward to Lake Drummond, which is in the middle of the swamp. Lake Drummond also feeds water through a feeder ditch to maintain the water level in the Dismal Swamp Canal. The canal is maintained as part of the Atlantic Intracoastal Waterway. During heavy storm events Lake Drummond inundated areas in the City of Chesapeake, Virginia and the surrounding area. The remnants of Hurricanes Dennis and Floyd in September 1999 caused significant damages form flooding in the city and the surrounding area.

The Section 905 (b) analysis was certified on November 14, 2003, which found there was a Federal interest to pursue feasibility level studies for preventing or minimized the flooding by diverting the floodwaters from Lake Drummond through the navigation locks at Deep Creek, Virginia and at South Mills, North Carolina. The locks are located at each end of the Dismal Swamp Canal. In addition, the reconnaissance phase will determine if flood damage reduction measures in the City of Chesapeake are warranted, as well as opportunities for ecosystem restoration. The City of Chesapeake, Virginia, is the potential study sponsor for the feasibility phase of the study, and they fully understand the cost-sharing requirements for the feasibility phase. The feasibility cost-sharing agreement is scheduled for execution in August 2004.

Fiscal Year 2004 funds will be used to complete the reconnaissance phase at full Federal expense, including final coordination of the project management plan and execution of the feasibility cost-sharing agreement with the potential study sponsor, and the initiation of the feasibility study. The funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study, including data collection, formulation of plan alternatives, and coordination with local interests. The preliminary estimated cost of the feasibility phase is \$1,200,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,300,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	600,000
Feasibility Phase (non-Federal)	600,000

The reconnaissance phase is scheduled for completion in August 2004. The feasibility study schedule is being determined.

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
Fourmile Run Baltimore District	1,960,000	149,000	97,000	350,000	1,364,000

The study area is located in the City of Alexandria and in Arlington County, Virginia, on Fourmile Run immediately above its confluence with the Potomac River. Fourmile Run drains an approximate 19 square-mile area from Brilyn Park, Fairfax County, Virginia, and flows southeasterly through Fairfax and Arlington Counties, and the City of Alexandria to its confluence with the Potomac River across from Washington, D.C.

A flood control project in the City of Alexandria, Virginia, completed in 1984, provides an improved channel, floodwall-protection system, and replaced two highway and four railroad bridges near Fourmile Run's confluence with the Potomac River. The project protects the area against a 100-year fluvial flood on Fourmile Run and provides recreational areas, including pedestrian and bike trails.

A reconnaissance report, certified in October 2002, found that there is a Federal interest to proceed to the feasibility phase of the study. The feasibility study will further evaluate potential solutions for flood damage reduction measures, as well as ecosystem restoration measures for the following: wetland creation and restoration; floodplain restoration; fish and wildlife habitat restoration, channel modification, beneficial use of dredged material; land acquisition; a master plan for restoring and protecting the natural infrastructure; and additional flood damage reduction measures. The non-Federal sponsors for the feasibility phase of the study are the City of Alexandria and Arlington County. The feasibility cost-sharing agreement was executed in January 2004.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study, including data gathering, economic and environmental analyses, and public coordination. The funds requested for fiscal year 2005 will be used to continue the feasibility phase, including formulation of alternative plans, environmental and economic analyses, and public coordination. The estimated cost of the feasibility phase is \$3,720,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$3,820,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,860,000
Feasibility Phase (Non-Federal)	1,860,000

The reconnaissance phase was completed in January 2004. The feasibility study schedule is being determined.

Subtotal Flood Damage Prevention Studies - Continuing 15,298,000 2,686,000 703,000 935,000 10,974,000

North Atlantic Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2004	FY 2004	FY 2005	After FY 2005
•	\$	\$	\$	\$	\$

#### 2. SURVEYS - CONTINUING

c. Shoreline Protection Studies: The amount of \$1,589,000 is requested in fiscal year 2005 for seven shoreline protection studies.

#### **NEW JERSEY**

New Jersey Shoreline Alternative Long-Term Nourishment 2,062,000 208,000 149,000 256,000 1,449,000 Philadelphia District

The study area includes over 120 miles of Atlantic Ocean coastline from Sandy Hook to Cape May Inlet, New Jersey. Presently, there are four Federally authorized beach fill projects constructed, one is under construction, and a potential eight additional ocean-front projects could be constructed within the next five years. The ultimate project costs for these combined projects total over \$2 billion. The September 1990 study for the New Jersey Shore recommended there is a Federal interest to proceed to further feasibility level studies for potential shoreline projects along the Atlantic coast of New Jersey.

The feasibility study will evaluate methods to manage New Jersey's coastal projects on a regional basis to ensure maximum benefits are achieved from the large Federal investment and to reduce long-term periodic nourishment costs. The study is developing a regional sand sediment plan, an improved understanding of the regional coastal processes, an efficient regional monitoring program, a regional coastal Geographic Information System, and a comprehensive beach, inlet and borrow area management strategies plans. The feasibility study will be coordinated with the New Jersey Department of Environmental Protection, the National Marine Fishery Service, and the U.S. Fish and Wildlife Service. The feasibility cost-sharing agreement was executed in December 2002 with the New Jersey Department of Environmental Protection.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study, including formulation of alternative plans. The funds requested for Fiscal Year 2005 will be used to continue the feasibility phase, including plan selection and test strategies, coordination with stakeholder working groups, develop modeling databases for coastal, beach-fill, and borrow area environmental resources, and initiate development of a regional coastal Geographic Information System The estimated cost of the feasibility phase is \$4,024,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost \$4,074,000 Reconnaissance Phase (Federal) \$ 50,000 Feasibility Phase (Federal) \$2,012,000 Feasibility Phase (Non-Federal) \$2,012,000

The reconnaissance phase was completed in December 2002. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
New Jersey Shore Protection, Hereford to Cape May Inlet	1,275,000	171,000	99,000	460,000	545,000

The study area is located in Cape May County along New Jersey's last coastal barrier island between Hereford Inlet and Cape May Inlet. This area includes the Towns of North Wildwood, Wildwood and Wildwood Crest. Coastal storms and tidal surges cause major damages to businesses, residences, and small marinas in these towns due to the low-lying topography of the beaches and lack of a dune system. In addition, accretion of shoreline along the southern end of the barrier island near Cape May Inlet is increasing the dredging requirements for the Federal navigation channel, where there is a U.S. Coast Guard Receiving Center. The accretion is also increasing the dredging requirements for the Town of Wildwood, New Jersey, to keep its outfall pipe system clear of sediment. The September 1990 study for the New Jersey Shore recommended there is a Federal interest to proceed to further feasibility level studies for potential shoreline protection projects along the Atlantic coast of New Jersey, which included the Hereford Inlet to Cape May Inlet area.

The feasibility phase is evaluating plan alternatives for hurricane and store damage reduction measures, including sand bypassing measures. In addition, the feasibility study is evaluating opportunities for ecosystem restoration in the back-bay areas to improve fish and wildlife habitats and restoring wetlands. The feasibility dost-Sharing agreement was executed in September 2002 with the New Jersey Department of Environmental Protection.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study, including problem identification, data collection, formulation of alternative plans, and coordination with local interests. The funds requested for Fiscal Year 2005 will be used to continue the feasibility study, including economic and environmental analyses, plan formulation, and coordination with local interests. The estimated cost of the feasibility phase is \$2,500,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$2,525,000
Reconnaissance Phase (Federal)	25,000
Feasibility Phase (Federal)	\$1,250,000
Feasibility Phase (Non-Federal)	\$1,250,000

The reconnaissance phase was completed in September 2002. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
Raritan Bay and Sandy Hook Bay, Highlands New York District	1,750,000	453,000	130,000	150,000	1,017,000

The study area is located along the Raritan Bay and Sandy Hook Bay in the Town of Highlands, New Jersey, in northeast Monmouth County, New Jersey, approximately 20 miles southwest of the Battery New York City. This low-lying suburban area is subject to tidal flooding from coastal storms and tidal surges that cause major damages to the Town's businesses, residences, and small marinas. Flood damages caused by high storm surges affects large areas of the Town of Highlands and the low-lying Raritan Bay shoreline. The floodwaters also cause flood damages from stream back-up and flow restrictions from storm drainage systems. Within the low-lying flood area approximately 880 residential and commercial structures are subject to severe flooding. Damages resulting from the December 1992 Northeaster caused 579 individuals to request Federal disaster assistance.

The reconnaissance study for the overall Raritan Bay and Sandy Hook Bay Study, completed in February 1994, recommended separate interim feasibility study be conducted for the Highlands area. The reconnaissance phase, certified in February 2001, found there is a Federal interest for further studies for potential hurricane and storm damage protection measures. The feasibility phase is evaluating plan alternatives for hurricane and storm damage protection measures along the shoreline, including floodwalls, tide gates, pump stations, and shoreline stabilization, which could cost as much as \$45 million. A feasibility cost-sharing agreement was executed in October 2001 with the New Jersey Department of Environmental Protection.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study, including additional data gathering and analysis, screening of alternatives, plan formulation and environmental scoping efforts. The funds requested for Fiscal Year 2005 will be used to continue the feasibility phase, including the refinement of alternatives and the economic and environmental comparison of the structural and non-structural solutions. The estimated cost of the feasibility phase is \$3,500,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$3,500,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	1,750,000
Feasibility Phase (Non-Federal)	1,750,000

The overall reconnaissance phase was completed in February 1994. The supplemental feasibility cost sharing agreement for Highlands was executed in October 2001. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
Raritan Bay and Sandy Hook Bay, Keyport New York District	1,625,000	478,000	130,000	150,000	867,000

The study area is located in the Town of Keyport in northern Monmouth County, approximately 20 miles southwest of the Battery New York City. This low-lying suburban area is subject to tidal flooding from coastal storms and tidal surges that cause major damages to the Town's businesses, residences, and small marinas. The Town of Keyport currently has no protective beach seaward of its bulkheads. Most of the bulkheads on the westside of the Town of Keyport are low and allow frequent flooding from tidal surges. The commercial area of the town is located within the low-lying floodplain, which subjects the merchandise and other commodities to damage during storm events. Damages resulting from the December 1992 Northeaster caused 48 individuals to request Federal disaster assistance and 11 families were provided with Federal housing assistance. The purpose of the feasibility study is to assess the need for hurricane and storm damage protection measures along the shoreline.

The reconnaissance study for the overall Raritan Bay and Sandy Hook Bay Study, completed in February 1994, recommended that separate interim feasibility studies be conducted including the Keyport area. The feasibility phase is evaluating plan alternatives for hurricane and storm damage protection measures along the shoreline, including floodwalls, breakwaters, tide gates, pump stations, shore stabilization elements and appurtenant features, which could cost as much as \$15 million. A feasibility cost-sharing agreement was executed in August 2001 with the New Jersey Department of Environmental Protection.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study, including additional data gathering and analysis, screening of alternatives, plan formulation and environmental scoping efforts. The funds requested for Fiscal Year 2005 will be used to continue the feasibility phase, including the refinement of alternatives to avoid and minimize wetlands impacts and the economic and environmental comparison of the structural and non-structural solutions. The estimated cost of the feasibility phase is \$3,250,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$3,250,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	\$1,625,000
Feasibility Phase (Non-Federal)	\$1,625,000

The overall reconnaissance phase was completed in February 1994. The feasibility cost sharing agreement for Keyport was executed in August 2001. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
Raritan Bay and Sandy Hook Bay, Leonardo New York District	1,375,000	1,011,000	97,000	198,000	69,000

The study area is located in Leonardo, Monmouth County, New Jersey, approximately 20 miles southwest of the Battery New York City. The Leonardo area is subject to tidal flooding from coastal storms and storm surges causing shoreline erosion and recession that affect the beach front. The downtown business and residential area, which surrounds a small harbor, is subject to significant main floor flooding from storm surges. In addition, these coastal storms and storm surges caused the recession of a short beach-front, which has eliminated any protection afforded to the area and is exposing existing coastal protection measures and drainage works to further damage. The purpose of the feasibility study is to assess the need for hurricane and storm damage protection measures along the shoreline.

The reconnaissance study for the overall Raritan Bay and Sandy Hook Bay Study, completed in February 1994, recommended separate interim feasibility study be conducted for the Leonardo area. Potential hurricane and storm damage protection measures being investigated include levees, tide gates, dunes, and beach fill. A supplemental feasibility cost-sharing agreement for Leonardo was executed in April 1999 with the New Jersey Department of Environmental Protection.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study, including economic optimization, environmental impact assessments, and local coordination. Fiscal Year 2005 funds will be used to continue the feasibility study, including plan selection and preparation of feasibility report. The estimated cost of the feasibility phase is \$2,750,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$2,750,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	1,375,000
Feasibility Phase (Non-Federal)	1,375,000

The overall reconnaissance phase was completed in February 1994. The supplemental feasibility cost-sharing agreement for Leonardo was executed in April 1999. The interim feasibility study schedule is being determined.

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
NEW YORK					
North Shore of Long Island, Asharoken	998,000	706,000	87,000	175,000	30,000

The study area, located in the Village of Asharoken some 40 miles east of New York City, is subject to tidal flooding from coastal storms. The Village, a portion of the Town of Huntington in Suffolk County, New York, is located on a narrow spit of land about 2.5 miles long with Long Island Sound to the north and Duck Island Harbor to the south. The feasibility study will assess potential hurricane and storm damage measures.

Residential and commercial properties experienced major damages from storms in 1962, 1992 and 1996. During the 1992 storm, over 3000 area residents were without access and emergency services due to the flooding of Asharoken Avenue, the only access route between the Village and the Long Island mainland. The reconnaissance report for the North Shore of Long Island, completed in September 1995, found that there is Federal interest to proceed to the feasibility phase and recommended further studies for a potential plan for beach fill and buried seawalls to protect the area and keep the access roadway free from flooding. The feasibility cost sharing agreement was executed March 21, 2001 with the New York State Department of Environmental Conservation.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study, including draft economic evaluation and plan selection. The funds requested for fiscal year 2005 will be used to continue the feasibility study, including final economic evaluation, plan selection, environmental assessment, and the preparation of the feasibility report. The estimated cost of the feasibility phase is \$1,996,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,996,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	998,000
Feasibility Phase (Non-Federal)	998,000

The reconnaissance phase was completed in March 2001. The feasibility study schedule is being determined.

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
North Shore of Long Island, Bayville New York District	1,850,000	1,157,000	111,000	200,000	382,000

The Village of Bayville study area is located in northeastern Nassau County on a narrow strip of land connecting the Center Island peninsula and Long Island. Bayville faces Long Island Sound to the north and Oyster Bay to the south. Several communities, especially the Village of Bayville, have incurred major losses due to coastal erosion and flooding.

Hurricanes, tropical storms, and northeasters frequently cause damages to the study area. In December 1992, a northeaster inundated hundreds of residential and business properties with damages estimated at \$12,000,000. Approximately 300 families were evacuated, and sections of Bayville were impassable for days.

The reconnaissance report, certified in May 1997, found there is a Federal interest to proceed to the feasibility phase of the study. The feasibility study is evaluating hurricane and storm damage reduction measures for the Bayville area, such as combined buried seawalls with setback flood walls and interior drainage works to reduce tidal inundation from Long Island Sound and Oyster Bay. The feasibility cost-sharing agreement was executed in March 2001 with the New York State Department of Environmental Conservation.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study, including environmental analyses, data collection, and evaluation of alternative plans. The funds requested for fiscal year 2005 will be used to continue the feasibility study, including economic evaluation, plan selection and the preparation of a draft feasibility report. The estimated cost of the feasibility phase is \$2,650,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$3,175,000
Reconnaissance Phase (Federal)	525,000
Feasibility Phase (Federal)	1,325,000
Feasibility Phase (Non-Federal)	1,325,000

The reconnaissance phase was completed in March 2001. The feasibility study schedule is being determined.

Subtotal Shoreline Protection Studies - Continuing 10,935,000 4,184,000 803,000 1,589,000 4,359,000

d. Special Studies: None

North Atlantic Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2004	FY 2004	FY 2005	After FY 2005
•	\$	\$	\$	\$	\$

#### 2. SURVEYS - CONTINUING

e. Ecosystem Restoration Studies: The amount of \$2,832,000 is requested in fiscal year 2005 for 16 ecosystem restoration studies.

#### MARYLAND

Chesapeake Bay Shoreline Erosion, MD, PA and VA 4,275,000 0 196,000 221,000 3,858,000 Baltimore and Norfolk Districts

The study area encompasses the Chesapeake Bay and tributaries in the state of Maryland, and the Commonwealths of Virginia and Pennsylvania, draining some 20,000 square miles along the east coast of the United States. The area is rural in the northern and southern portions of the watershed, and urban to suburban in the center portions of the watershed. The reconnaissance report, approved in December 2002, found there was a Federal interest for three feasibility studies to evaluate sediment issues in the Susquehanna River Basin and Chesapeake Bay, and three feasibility studies to evaluate shoreline erosion protection measures at several localities around the Chesapeake Bay. The first feasibility study effort is the Chesapeake Bay Shoreline Erosion - Sediment Budget, Modeling and Regional Sediment Management, Maryland, Pennsylvania and Virginia study, which is being conducted by the Baltimore District.

The second feasibility study will be conducted by Baltimore District. This feasibility study will focus on the sediment impacts and sediment reduction measures to the Chesapeake Bay by evaluating plan alternatives to reduce sediment inputs and wave re-suspension of existing sediments. Potential solutions to act as natural filters could by accomplished by large-scale replanting of sea grasses, oysters, and marshes. The potential sponsor for the Baltimore District feasibility study is the Maryland Department of the Environment, who fully understands the cost-sharing requirements for the feasibility phase of this study. The Baltimore District feasibility study cost sharing agreement is scheduled for execution in August 2004.

The third feasibility study will be conducted by Norfolk District. This feasibility study will focus on the ecosystem restoration measures, as well as shoreline protection measures to reduce shoreline erosion, navigation channel shoaling, and sediment transport in the lower Chesapeake Bay; and to restore submerged aquatic vegetation, and fish and wildlife habitats, in the Commonwealth of Virginia. The potential sponsors for the Norfolk District feasibility study are the Commonwealth of Virginia, Mathews County, and the Nature Conservancy, all who understand the cost-sharing requirements for the feasibility phase of this study. The Norfolk District feasibility study cost sharing agreement is also scheduled for execution in August 2004.

North Atlantic Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2004	FY 2004	FY 2005	After FY 2005
•	\$	\$	\$	\$	\$

Chesapeake Bay Shoreline Erosion, MD, PA and VA Baltimore and Norfolk Districts

Fiscal Year 2004 funds are being used prepare the project management plans, negotiate and execute the feasibility study cost sharing agreements for both studies and initiate the feasibility phases of the studies. The funds requested for fiscal year 2005 will be used to continue the feasibility phases of the studies, including data gathering, economic and environmental analyses, and public coordination. The preliminary estimated cost of the Baltimore District feasibility phase is \$6,000,000, and the preliminary estimated cost of the Norfolk District feasibility phase is \$2,400,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary for both studies cost sharing is as follows:

Baltimore District		Norfolk District	
Total Estimated Study Cost	\$6,050,000	Total Estimated Study Cost	\$2,425,000
Reconnaissance Phase (Federal)	50,000	Reconnaissance Phase (Federal)	25,000
Feasibility Phase (Federal)	3,000,000	Feasibility Phase (Federal)	1,200,000
Feasibility Phase (Non-Federal)	3,000,000	Feasibility Phase (Non-Federal)	1,200,000

The reconnaissance phases for both feasibility studies is scheduled for completion in August 2004. The feasibility study schedules are being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
Chesapeake Bay Shoreline Erosion - Sediment Budget, Modeling and Regional Sediment Management, MD, PA & VA Baltimore District	2,450,000	468,000	97,000	220,000	1,665,000

The study area encompasses the Chesapeake Bay and tributaries in the state of Maryland, and the Commonwealths of Virginia and Pennsylvania, draining some 20,000 square miles along the east coast of the United States. The area is rural in the northern and southern portions of the watershed, and urban to suburban in the center portions of the watershed. The reconnaissance report, approved in December 2002, found there was a Federal interest for three feasibility studies to evaluate sediment issues in the Susquehanna River Basin and Chesapeake Bay, and three feasibility studies to evaluate shoreline erosion protection measures at several localities around the Chesapeake Bay.

The Sediment Budget, Modeling and Regional Sediment Management study is the first feasibility resulting from the interim reconnaissance report. This study is incorporating new parameters for sediment transport, re-suspension, and shoreline erosion into the existing Chesapeake Bay water quality model. In an average year, some 5 million cubic yards of sediment is deposited in the Bay. This sediment impacts the Bay's water quality, causes losses to the Bay's submerged aquatic vegetation, oyster habitat, benthic habitat, wetlands, and shoals the navigation channels. The Sediment Budget, Modeling and Regional Sediment Management study will build on the existing Chesapeake Bay Model to develop the baseline data necessary for evaluating impacts from bay sedimentation and shoreline erosion. The revised model data will be used to develop a sediment budget for the Chesapeake Bay, develop sediment load reductions and allocations, and implement a sediment management strategy for the bay. In addition the revise model data will be used to develop the engineering and sediment process information necessary to formulate, design, and implement large-scale sediment management projects within the bay watershed. The Maryland Department of Natural Resources is the potential study sponsor, who fully understands the cost-sharing requirements for the feasibility phase of the study. The feasibility study cost sharing agreement is scheduled for execution in April 2004. Additional cost-sharing agreements will be executed when the sponsor's funding becomes available.

Fiscal Year 2004 funds are being used to continue into the feasibility study phase, including data collection and evaluation, model development, and public coordination. The funds requested for fiscal year 2005 will be used to continue the feasibility phase, including formulation of alternative plans, environmental analyses and public coordination. The preliminary estimated cost of the feasibility phase is \$3,900,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$4,400,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	1,950,000
Feasibility Phase (Non-Federal)	1,950,000

The reconnaissance phase is scheduled for completion in April 2004. The feasibility study completion schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
Eastern Shore, Mid-Chesapeake Bay Island Baltimore District	3,714,000	788,000	520,000	324,000	2,082,000

The Eastern Shore study area includes seven major watersheds; Sassafras River, Chester River, Eastern Bay, Choptank River, Nanticoke River, Wicomico River, and Pocomoke River that empty into the Chesapeake Bay.

The reconnaissance report, certified in November 1999, found there is a Federal interest to proceed to feasibility phase studies in eight areas and recommended that potential plans be evaluated for: (1) wetland corridor creation, (2) wetland restoration in marginal agricultural areas, (3) wetland floodplain function restoration on naturally occurring watercourses, (4) anadromous fish passage, (5) treatment of contaminated and nutrient-laden groundwater, (6) beneficial use of dredged material, (7) land acquisition, and (8) master plan for restoration, creation, and protection of the natural infrastructure.

Mid-Chesapeake Bay Island is the first feasibility study resulting from the reconnaissance report. This feasibility study is evaluating restoring hundreds of acres of wetlands and fish and wildlife island habitat in the Mid-Chesapeake Bay area through the beneficial use of dredged material. The feasibility cost-sharing agreement for the Mid-Chesapeake Bay Island area study was executed in November 2002 with the Maryland Department of Transportation (Maryland Port Administration). Additional feasibility cost-sharing agreements will be executed when the State of Maryland sets it study prioritization and funding becomes available.

FY 2004 funds are being used to continue the feasibility phase of the study, including formulation of alternatives plans, environmental impact analyses, and public involvement. The funds requested for FY 2005 will be used to continue the feasibility phase of the study, including formulation of alternatives plans, environmental impact analyses, and public involvement. The estimated cost of the feasibility phase is \$6,997,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$7,212,000
Reconnaissance Phase (Federal)	215,000
Feasibility Phase (Federal)	3,499,000
Feasibility Phase (non-Federal)	3,498,000

The reconnaissance phase for the Mid-Chesapeake Bay Island study was completed in November 2002. The Mid-Chesapeake Bay Island feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
Lower Potomac Estuary Watershed, St. Mary's Watershed Baltimore District	680,000	386,000	191,000	103,000	0

The Lower Potomac Estuary is 150 miles in length, has a drainage area of about 1,850 square miles and empties into the Chesapeake Bay. There are several navigation projects on the lower Potomac River. Increasing population and development growth is degrading the lower Potomac River watershed's environment in Maryland and Virginia. In addition, the construction of the Federal navigation projects contributed to the degradation and loss of the region's fish and wildlife habitats. The reconnaissance study focused on navigation, fish and wildlife restoration and creation, flood damage reduction and improvement of recreational opportunities. Completed in July 1997, the reconnaissance study recommended conducting feasibility studies in several watersheds throughout the study area to evaluate potential environmental restoration projects.

St. Mary's watershed, Maryland, is the second feasibility study to be conducted from the Lower Potomac Estuary Watershed reconnaissance effort. The feasibility study is evaluating environmental restoration needs and opportunities that Federal, State and local entities can use to plan potential projects to protect or minimize degradation to existing fish and wildlife habitats. The study sponsor is St. Mary's County, who executed the feasibility cost-sharing agreement in November 2000.

Fiscal Year 2004 funds are being used to continue the feasibility phase, including plan formulation and preparation of the draft feasibility report. The funds requested for fiscal year 2005 will be used to finalize the feasibility report. The estimated cost of the feasibility phase is \$1,200,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,280,000
Reconnaissance Phase (Federal)	80,000
Feasibility Phase (Federal)	600,000
Feasibility Phase (Non-Federal)	600,000

The reconnaissance phase for the St. Mary's watershed, Maryland area was completed in November 2000. The St. Mary's watershed, Maryland, feasibility study is scheduled for completion in September 2005.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
MASSACHUSETTS					
Blackstone River Watershed Restoration, MA and RI New England District	1,447,000	1,048,000	32,000	100,000	267,000

The study area includes the entire Blackstone River Watershed, which originates in Worcester, Massachusetts and flows southward to the National Estuary of Narragansett Bay in Pawtucket, Rhode Island. The watershed is approximately 540 square miles and encompasses 30 cities and towns in south central Massachusetts and northern Rhode Island. There is one Federal flood control reservoir and four local protection projects within this relatively small watershed to alleviate flooding in urban areas and protect major utilities and roadways. These projects consist of over 9 miles of channel improvements, dikes, floodwalls, tunnels and conduits, which have decreased the value and diversity of fish habitat in the project areas and have altered the natural hydrologic regime of the watershed. The Blackstone River is also the largest single source of pollutants such as suspended solids, PCB's, metals and organics discharging into Narragansett Bay. One source of this pollution is the re-suspension of contaminated sediments, which have collected behind existing impoundments along the river. The study will evaluate possible measures to correct the numerous problems of the Blackstone River Watershed and improve its overall resource value. A feasibility cost-sharing agreement was executed with the Massachusetts Executive Office of Environmental Affairs on 24 May 1999. By letter dated 31 May 2001, the Rhode Island Department of Environmental Management declined to participate in the feasibility study due to funding constraints.

Fiscal Year 2004 funds are being used to continue the feasibility phase, including cost estimates and plan evaluation. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase, including draft report preparation. The estimated cost of the feasibility phase is \$2,040,000, which is to be cost-shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$2,467,000
Reconnaissance Phase (Federal)	427,000
Feasibility Phase (Federal)	1,020,000
Feasibility Phase (Non-Federal)	1,020,000

The reconnaissance phase was completed in May 1999. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
NEW JERSEY					
Hudson-Raritan Estuary, Hackensack Meadowlands New York District	2,600,000	150,000	520,000	100,000	1,830,000

The study area encompasses approximately 8,450 acres of tidal wetlands in the Hackensack River Basin located in Bergen Essex and Hudson Counties, New Jersey. The Hackensack Meadowlands the largest remaining brackish tidal wetland complex in the Greater New York area. The area, about five miles west of Manhattan Island, is urban to suburban and has been heavily industrialized since the mid-nineteenth century. Since the 1890's, deforesting of the cedar stands, channel modifications, levee construction, and damming of the Hackensack River and its tributaries for irrigation and water supply purposes, has changed the estuary. Furthermore, the industrial activities, effluents discharges from local sources and highway stormwater systems, and leachates from former garbage dumps within the estuary, has contaminated the river bottom sediments and degraded the wetlands producing an unfavorable environment for fish and wildlife, including, wading birds, shorebirds, raptors, anadromous fish, estuarine fish, and terrapins.

The reconnaissance report for the Hudson-Raritan Estuary, approved in July 2000, found there is a Federal interest for further studies for the Hackensack Meadowlands. The interim feasibility study for the Hackensack Meadowlands is assessing items that have a Federal interest for ecosystem restoration, including contaminate reduction measures, creation of wetlands, water quality improvements, and alteration of hydrology/hydraulics to improve water movement and quality with in the Hackensack Meadowlands. The non-Federal sponsor is the New Jersey Meadowlands Commission, who executed a feasibility cost-sharing agreement in April 2003.

Fiscal Year 2004 funds will be used to continue the feasibility phase of the study, including coordination with the USFWS, environmental data analysis for sites under consideration restoration, and coordination with local interest. Funds requested for fiscal year 2005 will be used to continue the feasibility study, including geotechnical and biological baseline data collection, design development, and plan formulation for the Tier 1 sites and conceptual plans for the remaining sites. The estimated cost of the feasibility study is \$5,200,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$5,200,000
Reconnaissance phase (Federal)	0
Feasibility phase (Federal)	2,600,000
Feasibility phase (Non-Federal)	2,600,000

The reconnaissance phase was completed in April 2003. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
Hudson-Raritan Estuary, Lower Passaic River New York District	4,500,000	270,000	260,000	50,000	3,920,000

The study area is located in Essex County, New Jersey, about five miles west of the Battery of New York City and encompasses the Lower Passaic River Basin from the river's confluence with Newark Bay to Dundee Dam. The area is urban to suburban and has been heavily industrialized since the mid-nineteenth century. This industrial activity has resulted in the degradation of the wetlands; discharges of effluents into the river, and dumping of refuse resulting in contaminated sediments in the river that is unfavorable for fish and wildlife habitat.

The reconnaissance report for the Hudson-Raritan Estuary, approved in July 2000, found there is a Federal interest for further studies in the Lower Passaic River Basin. The feasibility study for the Lower Passaic River will assess items that have a Federal interest for ecosystem restoration, including contaminate reduction measures, creation of wetlands, water quality improvements, and alteration of hydrology/hydraulics to improve water movement and quality in the Lower Passaic River and sections of Newark bay. The non-Federal sponsor is the New Jersey Department of Transportation, Office of Maritime Resources, who executed a feasibility cost sharing agreement in June 2003.

Fiscal Year 2004 funds are being used to continue the feasibility study, including data collection and local coordination. Funds requested for Fiscal Year 2005 will be used to continue the feasibility study, including economic, hydraulic and environmental analyses necessary to establish baseline conditions, and formulate plan alternatives. The estimated cost of the feasibility study is \$9,000,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$ 9,000,000
Reconnaissance phase (Federal)	0
Feasibility phase (Federal)	4,500,000
Feasibility phase (Non-Federal)	4,500,000

The reconnaissance phase was completed in June 2003. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
Peckman River Basin New York District	2,220,000	135,000	195,000	100,000	1,790,000

The study is located within the Peckman River Basin in Essex and Passaic Counties, New Jersey. The Peckman River originates in the Town of West Orange and flows through the towns of Verona, Cedar Grove, and Little Falls, New Jersey, to its confluence with the Passaic River in West Paterson, New Jersey, draining an approximate area of 10 square miles. Within these towns, 220 homes and businesses are subject to flooding problems by the Peckman River and backwater from the Passaic River.

The reconnaissance study found there is a Federal interest to proceed to the feasibility phase of the study. The feasibility phase is evaluating potential solutions for flood damage reduction measures, as well as ecosystem restoration measures. The feasibility cost-sharing agreement was executed in March 2002 with the New Jersey State Department of Environmental Protection.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study, including data collection and preliminary assessments of existing baseline conditions. The funds requested for fiscal year 2005 will be used to continue the feasibility phase of the study, including plan formulation, problem identification and local coordination. The estimated cost of the feasibility phase is \$4,400,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$4,420,000
Reconnaissance Phase (Federal)	20,000
Feasibility Phase (Federal)	2,200,000
Feasibility Phase (Non-Federal)	2,200,000

The reconnaissance phase was completed in March 2002. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
Stony Brook - Millstone River Basin New York District	3,500,000	556,000	130,000	100,000	2,714,000

The study area is located in central New Jersey in Mercer, Middlesex, Monmouth, Hunterdon, and Somerset Counties and includes the Stony Brook, Peters Brook, Woodsville Brook, Baldwin Brook, Lewis Brook, and Honey Branch, all tributaries to the Millstone River. Stony Brook is the largest tributary to the Millstone River, draining an approximate 56 square miles area. This area is suburban in nature and the population is expected to grow by 30 percent by the year 2010.

Storm events cause frequent flooding in communities along Stony Brook and the other tributaries to the Millstone River. Hurricane Floyd in September 1999 and Hurricane Doria in August 1971 caused two of the largest floods of record in the area. Hurricane Floyd was a 500-year flood event inundating the area with 10-12 inches of rain in a 24-hour period and causing 4 deaths in New Jersey. In the Borough of Manville, New Jersey, Hurricane Floyd caused damages estimated at \$15.9 million, flooding some 1,200 homes and where local officials estimated that 75 homes suffered major structural damage. The Town of Manville also experiences fluvial flooding from the Millstone River in addition to backwater flooding from the Raritan River. Eight major flood events have affected Manville since 1921 with Hurricane Floyd causing damages in the hundreds-of-millions dollars range.

The reconnaissance study, completed in September 2000, found there is Federal interest to proceed to the feasibility phase of the study and recommended further studies for potential levees and floodwalls along the Millstone River in the Manville area. Ecosystem restoration for lake, streambank, and wetlands restoration were recommended along the Stony Brook, Millstone River, and Rocky Brook. The feasibility cost-sharing agreement was executed in March 2002 with the New Jersey State Department of Environmental Protection.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study, including economic, hydraulic, and environmental analyses necessary to establish baseline conditions and formulate alternatives. The funds requested for fiscal year 2005 will be used to continue the feasibility phase of the study, including selection of design of alternatives, environmental assessments, public involvement, and coordination with local interests. The estimated cost of the feasibility phase is \$6,800,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$6,900,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	3,400,000
Feasibility Phase (Non-Federal)	3,400,000

The reconnaissance phase was completed in March 2002. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
NEW YORK					
Hudson-Raritan Estuary, NY and NJ New York District	9,740,000	3,247,000	650,000	450,000	5,393,000

The study area includes the Port of New York and -New Jersey and includes the Ambrose and Anchorage Channel; New York and New Jersey Channels; Newark Bay Channel; Port Jersey Channel; Claremont Channel; Bay Ridge and Red Hook Channel; and Buttermilk Channel, the Upper and Lower New York Bays, the Raritan Bay and Jamaica Bay. The Port of New York-New Jersey is the largest port on the East coast with channels ranging depths of 35 to 45 feet. These waters and the surrounding shoreline, mudflats, intertidal marshes, and adjacent upland areas provide valuable habitat for fish, plant and wildlife resources, and accommodate migrating birds along the Atlantic flyway. The area is also utilized by a number of Federally threatened/endangered species including the shortnosed sturgeon, five species of sea turtles, peregrine falcons, piping plovers and rosette terns.

The reconnaissance report for the Hudson-Raritan Estuary, approved in July 2000, found there is a Federal interest for further studies. The feasibility study is assessing thirteen specifics sites within the estuary for potential ecosystem restoration measures, including contaminant reduction measures, creation of wetlands, water quality improvements, and alteration of hydrology/hydraulics to improve water movement and quality. The feasibility cost-sharing agreement was executed in July 2001 with the Port Authority of New York and New Jersey.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study, including data collection, preliminary plan formulation for a comprehensive estuary restoration improvement plan and coordination with local interests. The funds requested for fiscal year 2005 will be used to continue the feasibility phase, including data collection, economic, hydraulic, and environmental analyses necessary to formulate alternatives for a comprehensive restoration improvement plan and site-specific restoration opportunities. The estimated cost of the feasibility study is \$19,000,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	19,240,000
Reconnaissance Phase (Federal)	240,000
Feasibility Phase (Federal)	9,500,000
Feasibility Phase (Non-Federal)	9,500,000

The reconnaissance phase was completed in July 2001. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
Hudson-Raritan Estuary, Gowanus Canal New York District	2,500,000	520,000	260,000	150,000	1,570,000

The Gowanus Canal and Bay is located in Brooklyn, New York, approximately four miles southeast of the Battery, New York City. The non-Federal canal extends from the Hamilton Avenue Bridge at the end of a Federal navigation project located in Gowanus Bay, northeasterly into Brooklyn for approximately two miles. The Canal was constructed about 1881 to accommodate industrial users and commercial shippers from the Brooklyn waterfront. The area around the canal has been heavily industrialized and urbanized since the mid-nineteenth century.

The Gowanus Creek Channel is a Federal navigation project constructed between 1881 and 1952 it is a 30-foot deep channel, with a tapering width of 500-to-200 feet from Gowanus Bay to the vicinity of Sigourney Street, then an 18-foot deep channel, with a tapering width from 200-to-100 feet to the Hamilton Avenue Bridge for an approximate length of 4000 feet. In addition, there is a 30-foot deep, 150-foot wide branch channel from Gowanus Bay extending northerly to the Henry Street basin. The industrial users of the Canal throughout the nineteenth and twentieth centuries have caused significant environmental degradation to Gowanus Creek and Gowanus Canal by allowing hazardous materials to be deposited at the bottom of these channels. In addition, the pollution poses a great risk to area residents, and fish and wildlife.

The reconnaissance report for the Hudson-Raritan Estuary, approved in July 2000, found there is a Federal interest for further studies for the Gowanus Canal. The feasibility study for Gowanus Canal will assess opportunities that have a Federal interest for ecosystem restoration, including contaminate reduction measures, creation of wetlands, water quality improvements, and alteration of hydrology/hydraulics to improve water movement and quality. The feasibility cost-sharing agreement was executed in January 2002 with the New York City Department of Department of Environmental Protection.

Fiscal year 2004 will be used to continue the feasibility phase of the study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions, and formulate plan alternatives. Funds requested for fiscal year 2005 will be used to continue the feasibility study, including plan formulation and selection, and preparation of the environmental documentation. The estimated cost of the feasibility study is \$5,000,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$5,000,000
Reconnaissance phase (Federal)	0
Feasibility phase (Federal)	2,500,000
Feasibility phase (Non-Federal)	2,500,000

The reconnaissance phase was completed in January 2002. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
Upper Susquehanna River Basin, Catatonk Creek Watershed, NY Baltimore District	1,600,000	51,000	0	49,000	1,500,000

The Catatonk Creek Watershed is a portion of the Upper Susquehanna River Basin, located halfway between Elmira and Binghamton, New York. The area is primarily rural but has experienced environmental degradation from past and present land use practices, flooding, streambank erosion, sedimentation, and loss of wetland habitats, water quality degradation, and landscape fragmentation.

The reconnaissance study for the Upper Susquehanna River Basin, certified in June 2001, found there is a Federal interest for further feasibility studies in the State of New York and the Commonwealth of Pennsylvania. The non-Federal sponsor for New York, the New York State Department of Environmental Conservation, indicated in a letter dated May 3, 2002, that it is willing to negotiate a third feasibility cost-sharing agreement for a feasibility study in the Catatonk Creek watershed. This feasibility study will evaluate ecosystem restoration measures for wetland restoration, sediment and nutrient reduction for existing wetlands, fish and wildlife habitat restoration, and groundwater recharge within the sub-watershed areas. The New York State Department of Environmental Conservation fully understands the cost-sharing requirements for this feasibility study. The feasibility cost-sharing agreement schedule is being determined.

The funds requested for fiscal year 2005 will be used to complete the reconnaissance report, prepare the project management plan and coordinate the feasibility study cost-sharing agreement with the potential study sponsor, all at full Federal expense. The preliminary estimated cost of the feasibility phase is \$2,000,000, which is to be cost-shared on a 75-25 percent basis by Federal and non-Federal interests in accordance with Section 567 of the Water Resources Development Act of 1996. A summary of study cost-sharing is as follows:

Total Estimated Study Cost	\$2,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	500,000

The reconnaissance phase for the Catatonk Creek watershed schedule is being determined. The feasibility study schedule for Catatonk Creek is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
PENNSYLVANIA					
Schuylkill River Basin, Wissahickon Creek Basin Philadelphia District	879,000	186,000	33,000	100,000	560,000

This study area is located in southeastern Pennsylvania, along the Wissahickon Creek, a tributary to the Schuylkill River. The 25-mile long creek is about 13 miles upstream of the confluence with the Delaware River in Philadelphia, Pennsylvania, draining an approximate area of 64 square miles. High water flows during storm events have degraded the ecosystem and water quality within the creek due to sedimentation from streambank erosion, as well as causing flood damages in the communities of Whitpain, Lower Gwynedd, Whitemarsh, Springfield, Ambler, West Ambler, Lansdale, Ft. Washington and Abington, Pennsylvania. Major floods occurred in 1973, 1976, 1978, 1979, and 1982. The most recent storm event, in September 1996, caused damages estimated at \$3.5 million and damaged 500 residences. A Limited Reconnaissance Study of the Schuylkill River basin, completed in 1990, recommended further studies for flood damage reduction and protection measures within the Schuylkill River basin, including Wissahickon Creek.

The Section 905 (b) analysis was certified on August 16, 2002. This interim feasibility study will evaluate potential solutions for ecosystem restoration, flood plain management measures, streambank erosion control, water quality management, stream flow and corridor management, and geographic information system modeling, as well as opportunities for local flood damage reduction measures in the City of Philadelphia, Pennsylvania. The City of Philadelphia is the potential sponsor, who fully understands the cost-sharing requirements for this feasibility study. The feasibility cost-sharing agreement is scheduled to be executed in April 2004. Additional feasibility studies within the Wissahickon Creek watershed will be negotiated with Montgomery County and the Pennsylvania Department of Environmental Protection upon prioritization of the studies by them and the availability of local funding.

Fiscal Year 2004 funds are being used to negotiate and execute the feasibility cost-sharing agreement and to initiate the interim feasibility phase of the study, including data collection, and coordination with local interest. The funds requested for Fiscal Year 2005 will be used to continue the feasibility phase, including data collection, environmental, economic and engineering analyses, formulation of plan alternatives, and coordination with local interests. The preliminary estimated cost of the feasibility phase is \$1,508,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,633,000
Reconnaissance Phase (Federal)	125,000
Feasibility Phase (Federal)	754,000
Feasibility Phase (Non-Federal)	754,000

The reconnaissance phase is schedule for completion April 2004. The feasibility study completion schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
Schuylkill River Estuarine Philadelphia District	925,000	136,000	155,000	50,000	584,000

The study area is located within the 1,916-square-mile Schuylkill River Basin in Southeastern Pennsylvania. Several Federal projects within the river basin have degraded the ecosystem. Some of these projects include the multipurpose Blue Marsh Lake project, the 6-mile long Federal navigation project from the mouth of the Schuylkill River to University Avenue, Philadelphia, and the 10-mile long culm removal navigation project between the Fairmount and Norristown Dams. The latter two projects have degraded or eliminated fish and wildlife habitat and wetland areas in the lower basin, through bulkheading of the river's streambanks, disposal of dredged material along the streambanks, and disposal of culm removal. The lower estuary portion of the Schuylkill River in City of Philadelphia has been heavily industrialized since the early 19<sup>th</sup> century. The industrial effluences continue to degrade the estuary's water quality today. In addition, the upper Schuylkill River Basin has seen degradation of the ecosystem due to mining activities and acid mine run-off. The ecosystem degradation also inhibits anadromous fish runs throughout the basin. Federal and State of Pennsylvania Fish and Wildlife officials have also listed several species as being endangered, including the Peregrine falcons, golden eagles, short nose sturgeon, bog turtle, red belly turtle and eastern mud turtle.

The Section 905 (b) analysis was certified on November 14, 2003, which found there was a Federal interest to conduct additional feasibility level studies. The feasibility phase of the study will evaluate potential solutions for estuarine ecosystem measures in the Schuylkill River Basin, flood plain management, streambank erosion control, water quality management, stream flow and corridor management measures, and geographic information system modeling. The City of Philadelphia and the Pennsylvania Department of Environmental Protection are potential study sponsors, who fully understand the cost-sharing requirements for the feasibility study. The feasibility cost-sharing agreement is scheduled for completion in August 2004.

Fiscal Year 2004 funds are being used to complete the reconnaissance phase at full Federal expense, including final coordination of the project management plan and execution of the feasibility cost-sharing agreement with the potential study sponsor, and the initiation of the feasibility study. The funds requested for Fiscal Year 2005 will be used to continue the feasibility study, including data collection and coordination with local interests. The preliminary estimated cost of the feasibility phase is \$1,350,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1	1,600,000	
Reconnaissance Phase (Federal)	\$	250,000	
Feasibility Phase (Federal)	\$	675,000	
Feasibility Phase (Non-Federal)	\$	675,000	

The reconnaissance phase is scheduled for completion in August 2004. The feasibility study completion schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
VIRGINIA					
Elizabeth River Basin, Environmental Restoration, Hampton Roads, Scott's Creek Norfolk District	650,000	0	130,000	232,000	288,000

The study area for this second feasibility study effort will encompasses Scott's Creek in Portsmouth, Virginia. The bottom sediments and the surrounding wetlands of Scott's Creek in Portsmouth, Virginia have been contaminated for over two hundred years by industry and commerce making this tributary to the Elizabeth River one of the nation's most contaminated waterways. This sub-estuary of the Chesapeake Bay once supported wildlife spawning grounds for rare terns, peregrine falcons, and great egrets, as well as mud flats for shellfish.

The reconnaissance report for the Elizabeth River Basin, certified in November 1997, found there was a federal interest to pursue further feasibility studies for sediment restoration measures at four sites: Scuffletown Creek, Scott's Creek, the former Eppinger and Russell wood treatment facility site, and the Compostella Bridge site, as well as wetland ecosystem restoration measures at 19 sites. This second feasibility study will evaluate sediment restoration measures to remove/clean-up bottom sediments in the Scott's Creek, Portsmouth, Virginia area, as well as opportunities for additional wetland restoration measures at some of the remaining 11 sites within the Elizabeth River Basin. The potential sponsors for the second feasibility study are the Commonwealth of Virginia and the City of Portsmouth, Virginia, who understand the cost-sharing requirements for the feasibility phase of the study. The supplemental feasibility cost-sharing agreement is scheduled for execution in July 2004.

The funds requested for Fiscal Year 2004 will be used to negotiate and execute a feasibility cost-sharing agreement for the Scott's Creek feasibility study, prepare a project management plan, and initiate the Scott's Creek feasibility study, including data collection and coordination with local interests. The funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study, including economic and cultural analyses, data collection for plan formulation, and coordination with local interests. The preliminary estimated cost of feasibility phase is \$1,200,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,250,000
Supplemental FCSA (Federal)	50,000
Feasibility Phase (Federal)	600,000
Feasibility Phase (non-Federal)	600,000

The supplemental feasibility cost-sharing agreement for the Scott's Creek study is scheduled for execution in July 2004. The Scott's Creek feasibility study schedule is being determined.

North	Δtla	ntic	1 )r	/IQI	$\alpha$ r

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
Lynnhaven River Basin Norfolk District	3,100,000	100,000	50,000	483,000	2,467,000

The Lynnhaven River Basin is located in Virginia Beach, Virginia, on the south shore of the Chesapeake Bay. The river drains an approximate 50 square miles watershed in southeastern Virginia and flows northerly emptying into the Chesapeake Bay about 10 miles east of Norfolk, Virginia. A Federal navigation project is maintained within the upper reaches of the river. The project depth varies from 10 feet deep at the river's entrance with Chesapeake Bay, to a 6 feet deep channel at the narrows between Broad Bay and Linkhorn Bay. In addition, the river basin was once a highly productive ecosystem, producing the world famous Lynnhaven oyster. However, residential and commercial development, and the loss of wetlands and forested buffers have increased sedimentation, which degraded the ecosystem and water quality, causing the oyster population to decline to essentially no marketable production today. In addition, only 900 acres of wetlands exist today, which is less than half of the acreage present 30 years ago.

The Section 905 (b) analysis was certified in January 2004, which found there was a Federal interest for further feasibility phase studies for six areas within the Lynnhaven River Basin. The feasibility study will evaluate ecosystem restoration measures to improve water quality, restore wetlands, sub-aqueous vegetation, and fish and wildlife habitats, and improve the river bottom material by dredging or other decontamination methods. The potential sponsor the feasibility phase of the study is the City of Virginia Beach, Virginia, who understands the cost-sharing requirements to the feasibility phase of the study. The feasibility cost-sharing agreement is scheduled for execution in July 2004.

Fiscal Year 2004 funds are being used to complete the reconnaissance phase at full Federal expense, including final coordination of the project management plan and execution of the feasibility cost-sharing agreement with the potential study sponsor, and the initiation of the feasibility study. The funds requested in fiscal year 2005 funds will be used to continue the feasibility phase of the study, including economic and environmental analyses, preliminary plan formulation, and local coordination. The preliminary estimated cost of feasibility phase is \$6,000,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$6,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	3,000,000
Feasibility Phase (non-Federal)	3,000,000

The reconnaissance phase is scheduled for completion in July 2004. The feasibility study schedule is being determined.

Subtotal Ecosystem Restoration Studies - Continuing 44,780,000 8,041,000 3,419,000 2,832,000 30,488,000

North Atlantic Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2004	FY 2004	FY 2005	After FY 2005
•	\$	\$	\$	\$	\$

### 2. SURVEYS - CONTINUING

f. Watershed/Comprehensive Studies: The amount of \$200,000 is requested in fiscal year 2005 for one water/comprehensive study.

### **NEW HAMPSHIRE**

Merrimack River Watershed Study, NH and MA 3,700,000 630,000 260,000 200,000 2,610,000 New England District

The Merrimack River originates in Franklin, New Hampshire at the confluence of the Pemigewasset and Winnipesaukee Rivers and flows southerly towards the Massachusetts border then easterly towards the coast. The Merrimack River basin encompasses an approximate 5,010 square miles area in Massachusetts and New Hampshire. Significant improvements have been made to improve the overall quality of the Merrimack River. Federal and state agencies, communities and the private sector have made substantial investments in wastewater treatment plants to address point source pollution. However, elimination of combined sewer outfalls (CSOs) is needed to fully restore the ecosystem to support habitat for anadromous fisheries, a source of drinking water, and provide a recreational resource for the region. The US Environmental Protection Agency is requiring the communities of Haverhill, Lawrence, and Lowell in Massachusetts and Manchester and Nashua in New Hampshire to address eliminating CSOs discharges into the Merrimack River. Current estimates for eliminating CSOs is over \$500 million and the five communities are concerned with the high cost. These communities have formed the Merrimack CSO Coalition and are requesting that studies be conducted to allow for science based decisions on CSO mitigation and storm water control, as well as opportunities to restore anadromous fisheries, improve fish and wildlife habitat, restore degraded wetlands, address low flow issues, and prioritize investments to improve the water quality of the river.

The Section 905 (b) analysis was certified on January 25, 2002, which found there was a Federal interest to pursue further watershed/comprehensive studies in the Merrimack River Watershed. A cost-sharing agreement was executed with the City of Lowell, representing the Merrimack CSO Coalition, on 20 February 2002 for Phase I of the study. A second cost-sharing agreement is scheduled for execution with the City of Lowell for the Phase II investigations in August 2004.

Fiscal Year 2004 funds are being used to continue the study, including completion of the Phase I investigations in September 2004; and, coordination of a project management plan and execution of a cost-sharing agreement for the Phase II investigations with potential study sponsor; and, initiation of the Phase II investigations, including data collection and evaluation, river studies and computer modeling. The funds requested for Fiscal Year 2005 will be used to continue the

North Atlantic Division

2,610,000

200,000

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2004	FY 2004	FY 2005	After FY 2005
•	\$	\$	\$	\$	\$

Merrimack River Watershed Study, NH and MA New England District

The study schedule is being determined.

phase II investigations of the study, including watershed modeling and analysis of plan alternatives. The estimated cost of the feasibility study is \$7,200,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost Cost Sharing Agreement	\$7,300,00 100,00
Cost Sharing Agreement Comprehensive Study (Federal)	3,600,00
Comprehensive Study (Non-Federal)	3,600,00

630,000

260,000

Subtotal Watershed/Comprehensive Studies - Continuing 3,700,000

TOTAL SURVEYS - CONTINUING	78,529,000	16,956,000	5,565,000	6,506,000	49,502,000
TOTAL SURVEYS – NEW AND CONTINUING	78,629,000	16,956,000	5,565,000	6,606,000	49,502,000

3.PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) – NEW: None.

North Atlantic Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2004	FY 2004	FY 2005	After FY 2005
•	\$	\$	\$	\$	\$

## 4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - CONTINUING

a. Ecosystem Restoration: None.

b. Navigation: None.

c. Watershed/Comprehensive:

d. Shoreline Protection: The amount of \$135,000 is requested in fiscal year 2005 for one shoreline protection PED activity.

### **NEW JERSEY**

Great Egg Harbor Inlet to Townsends Inlet 1,043,000 418,000 490,000 135,000 0
Philadelphia District

This project area is located along the Atlantic coast of New Jersey in Cape May County about 8 miles South of Atlantic City, New Jersey, and includes the coastal barrier islands of Peck Beach and Ludlam Beach. The March 1962 storm damaged 2,629 structures with damages estimated at \$24,300,000. The December 1992 storm caused damages to the area estimated at \$1,300,000. The feasibility report, completed in September 2001, recommended a hurricane and storm damage reduction project consisting of a 100-foot wide berm and dune system at elevation +13 NAVD for the southern end of project at Ocean City, New Jersey, and a 50-foot wide berm and dune system at elevation of +15 NAVD for Ludlam Beach. Periodic nourishment will be required every 3 years on Peck Beach and every 5 years on Ludlam Beach for the 50-year project life. The estimated initial project cost is \$46,700,000, with an estimated Federal cost of \$30,400,000 and an estimated non-Federal cost of \$16,300,000. The average annual benefits amount to \$4,324,000 for the south end of the Peck Beach Island portion and \$6,487,000 for the Ludlam Beach Island portion of the project, all for hurricane and storm damage reduction savings, based on the latest economic analysis dated October 2002. The benefit-cost ratio is 1.9 to 1 and 1.6 to 1 for each project portion, respectively. The design agreement was executed in September 2002 with the New Jersey Department of Environmental Protection. Preconstruction engineering and design phase will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the preconstruction engineering and design period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contributions in line with the project cost sharing will be accomplished in the first year of construction.

Consistent with the cost-sharing and financing concepts enacted by the Water Resources Development Act of 1986 as amended, local interest are required to provide all lands, easements, rights-of-way, and relocations necessary for the construction, estimated at \$425,000; pay 35 percent of costs allocated to beach

North Atlantic Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2004	FY 2004	FY 2005	After FY 2005
•	\$	\$	\$	\$	\$

Great Egg Harbor Inlet to Townsends Inlet Philadelphia District

erosion control, estimated at \$15,875,000; and pay 50 percent of the cost of periodic nourishment for the 50-year life of the project every 3 years for the Peck Beach Island project portion and every 5 years for the Ludlum Beach Island project portion, estimated at \$925,000 annually.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$1,391,000	Engineering and Design Costs	\$1,391,000
Initial Federal Share	1,043,000	Ultimate Federal Share	904,000
Initial Non-Federal Share	348,000	Ultimate Non-Federal Share	487,000

Fiscal Year 2004 funds are being used to continue the preconstruction engineering and design phase, which includes plans and specifications. The funds requested for Fiscal Year 2005 will be used to complete environmental coordination, and plans and specifications. The preconstruction engineering and design phase is scheduled for completion in September 2005.

Subtotal Shoreline Protection - Continuing 1,043,000 418,000 490,000 135,000 0

North Atlantic Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2004	FY 2004	FY 2005	After FY 2005
•	\$	\$	\$	\$	\$

## 4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - CONTINUING

e. Flood Control: The amount of \$250,000 is requested in fiscal year 2005 for two flood control PED activities.

### **NEW JERSEY**

Passaic River, Harrison 2,000,000 731,000 98,000 200,000 971,000 New York District

This project area is located on the lower Passaic River in Town of Harrison, New Jersey, which is about 10 miles west of the Battery New York City. Major flooding damages commercial, residential, and industrial properties in the town. The recommended project from the draft Passaic River Main Stem general design memorandum, completed in September 1995, includes a levee and floodwall system consisting of 1,750 feet of levees, 6.5 feet high and 50 feet wide; and 5,700 feet of floodwalls 6.2 feet high. In addition, there will be eight closure structures in the system and interior drainage facilities with gravity culverts with flap and sluice gates, and three pumping stations. The project will provide a 100-year level of protection to about 200 commercial and residential properties in Harrison, New Jersey. The recommended project is estimated to cost \$17,200,000, with an estimated Federal cost of \$11,200,000 and an estimated non-Federal cost of \$6,000,000. The benefit-cost ratio is approximately 3.4 to 1, based on the latest economic analysis dated October 1994. The project sponsor is New Jersey Department of Environmental Protection, who fully understands the cost sharing requirements for this effort. Preconstruction engineering and design will ultimately be cost-shared at the rate for the project to be constructed, but will be financed through the preconstruction engineering and design period at 100 percent Federal funds because preconstruction engineering and design for this project was initiated under the Passaic River Mainstem, New Jersey, project. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first years of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering And Design Cost	\$2,000,000	Engineering Design Cost	\$2,000,000
Initial Federal Share	\$2,000,000	Ültimate Federal Share	\$1,300,000
Initial Non-Federal Share	0	Ultimate Non-Federal Share	\$ 700,000

The Water Resources Development Act of 1990, as modified by the Water Resource Development Act of 1992 authorized this project for construction. In accordance with the cost-sharing and financing concepts enacted by the Water Resources Development Acts of 1986, as amended, local interests are required to provide all, lands, easements, rights-of-way, relocations, disposal area; pay 35 percent of all cost allocated to flood control and environmental protection and restoration; bear all costs of betterments to the project; and provide all costs of operation, maintenance and replacement of flood control facilities.

North Atlantic Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2004	FY 2004	FY 2005	After FY 2005
•	\$	\$	\$	\$	\$

Passaic River, Harrison New York District

Fiscal Year 2004 funds are being used to continue preconstruction engineering and design, including detailed engineering and design activities. The funds requested for Fiscal Year 2005 will be used to continue the pre-construction engineering and design, including detail engineering and coordination of environmental documentation. The preconstruction engineering and design schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2004 \$	Allocation FY 2004 \$	Tentative Allocation FY 2005 \$	Additional to Complete After FY 2005 \$
South River, Raritan River Basin New York District	3,000,000	69,000	66,000	50,000	2,815,000

The project area includes the communities of South River, Sayreville, East Brunswick and Old Bridge, New Jersey, along the South River, a tributary to the Raritan River, located in Middlesex County, New Jersey. This highly developed suburban area is subject to tidal flooding from storms. The storms that occurred in December 1992 and March 1993 caused damages estimated at \$6,100,000 to residential and commercial properties. The Chief of Engineers Report for South River, Raritan River Basin, New Jersey project, completed in July 2003, recommended a project for hurricane and storm damage reduction measures as well as an ecosystem restoration measure. The recommended flood control project consists of 10,700 feet of levees, 1,650 feet of floodwalls along the eastern and western banks of the lower South River with a 320-foot upstream storm surge barrier across the South River, located just downstream of the Veteran's Memorial Bridge, interior drainage facilities consisting of diversion pipes and gravity outlets are included in the levees and floodwalls. A 1,200 cubic foot per second pumping station and box culverts are included with the storm surge barrier to prevent flooding caused by the back up of the South River flows when the storm surge barrier is closed. This project will protect approximately 1,200 residential and commercial structures in South River, Sayreville, East Brunswick and Old Bridge. In addition, the Chief's Report recommends an 11.1-acre mitigation plan to offset unavoidable impacts to the natural resources caused by construction of the project and an approximant 379-acre wetlands restoration plan for the areas located primarily on Clancy Island between the Washington Canal, South River, and the Raritan River, and on the west bank of the South River adjacent to the Veterans Memorial Bridge. The estimated project cost is \$104,600,000, with an estimated Federal cost of \$68,000,000 and an estimated non-Federal cost of \$36,600,000. The average annual benefits for the flood control project amount to \$9,161,000, all for hurricane and storm damage reduction benefits, based on the latest economic analysis dated September 2002. The benefit-cost ratio is 2.2 to 1. The New Jersey Department of Environmental Protection is the potential project sponsor and fully understands the preconstruction engineering and design cost-sharing requirements. The design agreement is scheduled for execution in March 2004. Preconstruction engineering and design will ultimately be cost shared at the rate for the project to be constructed, but will be financed through the preconstruction engineering and design period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sproject cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering And Design Cost	\$4,000,000	Engineering Design Cost	\$4,000,000
Initial Federal Share	\$3,000,000	Ŭltimate Federal Share	\$2,600,000
Initial Non-Federal Share	\$1,000,000	Ultimate Non-Federal Share	\$1,400,000

Consistent with the cost-sharing and financing concepts exacted by the Water Resources Development Act of 1986 and 1996, local interests are required to provide all lands, easements, rights-of-ways, relocations, and suitable disposal/borrow areas, estimate to cost \$9,600,000; and pay 35 percent of all costs allocated to flood control and environmental protection and restoration, estimate to cost \$27,000,000; and provide all costs of operation, maintenance and replacement of

North Atlantic Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2004	FY 2004	FY 2005	After FY 2005
-	\$	\$	\$	\$	\$

South River, Raritan River Basin New York District

storm damage reduction facilities; and all costs related to operation, maintenance, repair, rehabilitation, and replacement of the completed project, estimated to cost \$221,000 annually for the hurricane and storm damage features and \$78,800 annually for the ecosystem restoration features.

Fiscal Year 2004 funds will be used to initiate preconstruction engineering and design, including detailed engineering and design activities. The funds requested for Fiscal Year 2005 will be used to continue the preconstruction engineering and design effort. The preconstruction engineering and design schedule is being determined.

Subtotal Flood Control – Continuing	5,000,000	800,000	164,000	250,000	3,786,000
f. Multiple Purpose Power: None					
TOTAL PRECONSTRUCTION ENGINEERING AND DESIGN (PED) - CONTINUING	6,043,000	1,218,000	654,000	385,000	3,786,000
GRAND TOTAL SURVEYS AND PRECONSTRUCTION ENGINEERING AND DESIGN	84,672,000	18,174,000	6,219,000	6,991,000	53,288,000

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Washington, DC & Vicinity (New)

LOCATION: Washington, DC at the confluence of the Anacostia and Potomac Rivers.

DESCRIPTION: The existing flood protection project for downtown Washington, D.C., was authorized by the Flood Control Act of 1936 and consists of a levee between the Lincoln Memorial and Washington Monument, a raised section of P Street, SW, adjacent to Fort McNair, and three temporary closures. The authorized modifications will eliminate the temporary closures at 23rd Street and Constitution Avenue, NW, and 2nd and P Streets, SW. The temporary closure at 17th Street, NW, has been redesigned to improve its reliability and minimize the time required for construction. The authorized modifications will bring the top of the existing levee along the Reflecting Pool between 23rd and 17th Streets to a uniform elevation and increase the level of freeboard protection provided. Three drainage control structures have also been added to prevent backflow through the storm sewer system. All work is programmed.

AUTHORIZATION: Flood Control Act of 1946 and Water Resources Development Act of 1996. The project was reauthorized in the Water Resources Development Act of 1999.

REMAINING BENEFIT - REMAINING COST RATIO: 9.1 to 1 at 5 7/8 percent.

TOTAL BENEFIT - COST RATIO: 5.0 to 1 at 5 7/8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the Post Authorization Change Report dated February 1998 at October 1997 price levels.

SUMMARIZED FINANCIAL	DATA	ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 2004)	PHYSICAL PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost: Cash Contributions \$0 Other Costs 0	\$7,000,000 0		Entire Project	0	TBD
Total Estimated Project Cost	\$7,000,000				

Division: North Atlantic District: Baltimore Washington, DC & Vicinity

## SUMMARIZED FINANCIAL DATA: (continued)

Allocations to 30 September 2003	2,992,000			PHYSICAL DATA
Conference Allowance for FY 2004	250,000			
Allocation for FY 2004	164,000	<u>1</u> /	23rd Street, NW	-3 foot earth embankment, 1 drainage
Allocations through FY 2004	3,156,000	45		control structure
Allocation Requested for FY 2005	500,000	52	Reflecting Pool Levee	Fill at low spots
Programmed Balance to Complete			17th Street, NW	-3 foot concrete barrier, 8 foot
after FY 2005	3,344,000			temporary earth embankment, 1
<b>Unprogrammed Balance to Complet</b>	e			drainage control structure
after FY 2005	0		2nd & P Streets, SW	-2 foot earth berm, 1 drainage
				control structure

<sup>1/</sup> Reflects \$86,000 reduction assigned for savings and slippage.

JUSTIFICATION: Flooding on the Potomac River at Washington, DC is affected by both tidal flooding from the Chesapeake Bay and the flood flows on the Potomac River upstream from Washington, DC. Flooding in March 1936 led to estimated damages of \$7,993,000 in Washington, DC and the loss of two lives. This damage estimate is based on development existing at the time of the flood. The project, authorized by the Flood Control Act of 1936, primarily consisted of: a wall and levee 2,300 feet long at Potomac Park between the Lincoln Memorial and the Washington Monument with a gap to accommodate an emergency closure structure, and raising a section of P Street, all to protect the downtown Washington area; and a wall and levee 12,900 feet long to protect the Anacostia Naval Air Station and Bolling Air Force Base. The project, which was placed in operation in 1940, was constructed to protect against a flood discharge of 700,000 cubic feet per second on the Potomac River. Subsequent to project completion, settlement of P Street occurred and construction in Potomac Park increased the gap in the protection. Due to the experience of the 1942 flood, the Flood Control Act of 1946 authorized improvements to restore the design level of protection and improve the operation continues to require implementation of emergency measures such that the ability of the project to provide the design level of protection is questionable. The estimated average annual benefits, all flood control, are \$2,100,000 based on the Post Authorization Change Report dated February 1998 at October 1997 price levels.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Initiate levee construction	425,000
Planning, Engineering & Design	25,000
Construction Management	50,000
Total	\$500.000

NON-FEDERAL COSTS: None.

Division: North Atlantic District: Baltimore Washington, DC & Vicinity

STATUS OF LOCAL COOPERATION: The local assurers for the project modification are the National Park Service, Ft. McNair, and the District of Columbia. These agencies will be responsible for providing lands, easements, and rights-of-way and operating and maintaining the project including making emergency closures during flood events. Letters of intent to provide local cooperation have been secured from each agency. A Memorandum of Understanding with the Park Service and Ft. McNair and a Memorandum of Agreement with the District of Columbia are scheduled for execution by January 2005.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$7,000,000 is an increase of \$840,000 from the latest estimate (\$6,160,000) submitted to Congress (FY 1999). This change includes the following items:

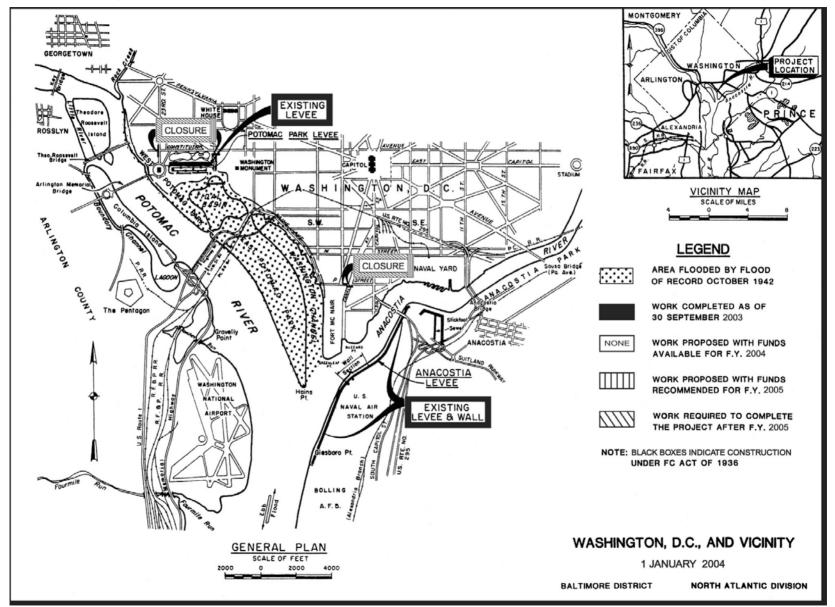
Item	Amount
Post Contract Award and Other Estimating Adjustments Price Escalation on Construction Features	\$100,000 \$740,000
TOTAL	\$840,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment including Finding of No Significant Impact is included in the final General Design Memorandum dated May 1992. The Supplement to the GDM dated June 1996 also included an environmental assessment and Finding of No Significant Impact addressing changes since the GDM.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986.

Division: North Atlantic District: Baltimore Washington, DC & Vicinity

# **Department of the Army**



APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: New York & New Jersey Harbor, New York and New Jersey (Continuing)

LOCATION: The Port of New York and New Jersey is located within the NY/NJ Harbor Estuary shared between the states of New York and New Jersey and consists of various navigation channels. These channels include: Ambrose Channel; Anchorage Channel; Kill Van Kull and Newark Bay Channel; Arthur Kill Channel; Port Jersey Channel; and, Bay Ridge and Red Hook Channel.

DESCRIPTION: This project consolidates four authorized projects.

- 1.) The Kill Van Kull and Newark Bay Channels, NY and NJ project consists of deepening existing 40-foot project to 45 feet MLW. Unprogrammed work includes dredging of Pierhead Channel and Port Newark in the vicinity of Port Newark and Port Elizabeth.
- 2.) The New York Harbor and Adjacent Channels, Port Jersey Channel, NJ project consists of deepening the non-Federal access channel to 41 feet MLW from the Federal Anchorage Channel to its head of navigation.
- 3.) The Arthur Kill, Howland Hook Marine Terminal, NY and NJ project consists of deepening the existing Federal 35-foot Arthur Kill Channel to 41 feet MLW from its confluence with the Kill Van Kull Channel to Howland Hook Marine Terminal in Staten Island, New York, and to 40 feet MLW from the Howland Hook Marine Terminal to the Tosco Oil Terminal oil facilities, New Jersey and New York, respectively. Also included within the Arthur Kill Channel are selected widenings and realignments. The Arthur Kill Project also provides for mitigation consisting of restoration and enhancement of approximately 23 acres of intertidal salt marsh).

  4.) The New York and New Jersey Harbor, NY and NJ, project consists of deepening the Ambrose Channel to 53 feet MLW; the Anchorage Channel, Kill Van Kull, Newark Bay, Port Jersey Channel, Bay Ridge Channel, and the Arthur Kill Channel to Howland Hook to 50 feet MLW and 52 feet MLW if in rock or otherwise hard material. Mitigation for project impacts, turning basins and selective bulkheading are included. All work is programmed.

AUTHORIZATION: Supplemental Appropriations Act of 1985, Water Resources Development Acts of 1986, 1996, 1999, and 2000.

REMAINING BENEFIT - REMAINING COST RATIO: 3.0 to 1 at 6 5/8 percent

TOTAL BENEFIT - COST RATIO: 2.8 to 1 at 6 5/8 percent

INITIAL BENEFIT - COST RATIO: 2.8 to 1 at 6 5/8 percent (FY 2002)

BASIS OF BENEFIT - COST RATIO: The benefit-to-cost ratio shown above applies to the consolidation of the four authorized projects. The analysis reflects annualized costs and benefits, adjusted to October 2001 price levels.

Division: North Atlantic

District: New York

New York & New Jersey Harbor, NY and NJ

		ACCUM.		PHYSICAL
<u> </u>			PERCENT	COMPLETION
SUMMARIZED FINANCIAL DATA		,	COMPLETE	SCHEDULE
Estimated Assumption Description (CoE)	#4.704.000.000	Programmed work:		
Estimated Appropriation Requirement (CoE) Programmed Construction \$1,686,700,000	\$1,761,200,000	) KVK Phase I 40 ft.	100	Son 1005
Unprogrammed Construction 74,500,000		Phase II 45 ft.	80	Sep 1995 TBD
Oriprogrammed Construction 74,500,000		Port Jersey Channel		TBD
Estimated Appropriation Requirement (USCG)	4,050,000		15	TBD
Estimated Total Appropriation Requirement	1,765,250,000			TBD
Estimated Total Appropriation Requirement	1,700,200,000	Unprogrammed work		100
Future Non-Federal Reimbursement	249,546,80		0	Indefinite
Programmed Construction 240,454,800	-,,	Entire Project:	22	Indefinite
Unprogrammed Construction 9,092,000			AL DATA	
Estimated Federal Cost (Ultimate) (CoE)	1,511,653,200			vark
Programmed Construction 1,446,245,200		Bay from 35 ft to 40 f		
Unprogrammed Construction 65,408,000		b. Deepen the Port J	Jersey Channe	el from
		35 ft. to 41 ft.		_
Estimated Non-Federal Cost	1,909,789,800			
Programmed Construction	1,884,277,800	its confluence with th		
Cash Contribution 1,282,678,000		the Howland Hook M		
Other Costs 361,145,000		35 ft. to 40 ft and the		
Reimbursements: 240,454,800 Unprogrammed Construction	25,512,000	40 ft to the TOSCO T d. NY & NJ Harbor: I		2010
Cash Contribution 16,420,000	25,512,000	channels from their d		
Other Costs 0		deepen the Ambrose		
Reimbursements 9,092,000		to 53 ft. the Anchorage		
7,002,000		45 ft. to 50 ft. and the		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Total Estimated Programmed Construction Costs	\$3,334,573,000	Channel from 40 ft. to		ר
Total Estimated Unprogrammed Construction Costs	90,920,000	areas are provided fo		
Total Estimated Project Cost	3,425,493,000	Arthur Kill and Port Je		
•		along with mitigation		•
		benthic habitat and a		

Division: North Atlantic District: New York New York & New Jersey Harbor, NY and NJ

SUMMARIZED FINANCIAL DATA: (continued)

Allocations to 30 September 2003 \$425,177,000

Conference Allowance for FY 2004 110,000,000

Allocation for FY 2004 109,533,000 1/2

Allocation through FY 2004 510,183,000 30

Allocation Requested for FY 2005 103,000,000 36

Programmed Balance to Complete after FY 2005 1,048,990,000

Unprogrammed Balance to Complete after FY 2005 74,500,000

1/ Reflects \$24,343,000 reduction assigned as savings and slippage, \$651,000 rescinded in accordance with FY04 Energy and Water Development Appropriations Act, and \$24,527,000 reprogrammed to the project.

JUSTIFICATION: The Port of New York-New Jersey is the largest port on the East Coast, providing more than 228,000 port related jobs, \$12 billion in economic activity, and serves more than 17 million consumers in the States of New York and New Jersey. Through its intermodal links, the Port provides second day access to another 80 million consumers in the northeast and mid-western states (35% of the nation). The Port annually receives and ships over \$82 Billion (110 million long tons) of waterborne general cargo to all parts of the United States and throughout the world and receives petroleum and related products from ports in the Atlantic, and Gulf Coasts, the Caribbean, Africa, and the Persian Gulf.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue Construction Contracts including Engineering, Design	
and S&A	\$87,000,000

a) Kill Van Kull & Newark Bay, Area 4B 15,000,000

b) NY Harbor & Adjacent Channels,

Port Jersey, Areas 2B 22,000,000

c) Arthur Kill, Howland Hook Marine Terminal

Areas 2/3 50,000,000

Initiate Construction Contract, Area S –KVK-2 9,000,000 NY & NJ Harbor Deepening (50 Feet) Engineering 5,000,000

and Design

Development of a regional dredged material treatment

facility (as directed by Congress in FY 2004) 2,000,000

TOTAL \$103,000,000

Division: North Atlantic

District: New York

New York & New Jersey Harbor, NY and NJ

NON-FEDERAL COSTS: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsors must comply with the Requirements listed below:

REQUIREMENTS OF LOCAL COOPERATION:	Payments During Construction And Reimbursement	Annual Operation, Maintenance and Replacement Costs
Pay 100 percent of costs to modify local service facilities, where necessary, for the construction of the project.	\$ 304,662,000	\$205,000
Pay 25-50 percent of the costs allocated to deep draft navigation during construction. <u>1</u> /	1,299,098,000	
Pay for all lands, easements, rights of way and relocations	56,483,000	
Pay an additional 10 percent of the costs allocated to deep draft navigation within a period of 30 years following completion of construction which is partially offset by a credit allowed for the value of lands, easements, rights of way, and relocation.	249,546,800	
Contribute 50 percent of the annual charges for interest and amortization of the Federal first cost of the Port Jersey 41-foot project and 50 percent of the operations and maintenance until the improvement is serving/benefiting multiple owners/properties. (Approximately \$3 million annually.) If multiple owners are not established, the contribution could range to a maximum of \$145,629,000.	0	
Total Non-Federal Costs	\$1,909,789,800	\$205,000

Total Non-Federal Costs \$1,909,789,800 \$205,000

1/ The cost sharing percentage of this project includes the cost sharing of the general navigation features deepening to 45 feet at 25 percent and deepening of those features from 45 feet to 50 feet at 50%.

Division: North Atlantic District: New York New York & New Jersey Harbor, NY and NJ

#### STATUS OF LOCAL COOPERATION:

- (1) On the Kill Van Kull and Newark Bay Channels element, a Project Cooperation Agreement for the 45-foot deepening project was executed for the Phase II deepening on 13 January 1999.
- (2) On the NY Harbor and Adjacent Channels, Port Jersey Channel element, the State of New Jersey and the Port Authority of New York and New Jersey (for the limited purpose of indemnification only) are the Non-Federal sponsors of the project. The project cooperation agreement was executed on 23 July 2002.
- (3) On the Arthur Kill, Howland Hook Marine Terminal element, The Port Authority of New York and New Jersey is the non-Federal sponsor for the project. The PCA was executed on 25 July 2002.
- (4) On New York and New Jersey Harbor element, the Port Authority of NY & NJ by letter dated 27 February 1997 indicated they would be the primary local sponsor. The project cooperation agreement is scheduled to be executed in May 2004.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of \$1,761,200,000 is the same as the latest estimate (\$1,761,200,000) presented to Congress (FY 2004).

### STATUS OF ENVIRONMENTAL IMPACT STATEMENT:

- (1) On the Kill Van Kull and Newark Bay Channels element, the Final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency (EPA) on 31 July 1981. A Supplemental EIS was filed with EPA on 14 February 1986. The Final Supplement to the EIS was filed with EPA on 13 February 1987. The Record of Decision was executed on 1 April 1987. An Environmental Assessment and Finding of No Significant Impact was issued on 30 April 1997 as part of the LRR for the Phase II deepening.
- (2) On NY Harbor and Adjacent Channels, Port Jersey Channel element, the final EIS was filed with the Environmental Protection Agency (EPA) on 29 April 1988, and a final Environmental Assessment and Finding of No Significant Impact was issued June 2000. A Record-of-Decision was executed on 23 October 2000.
- (3) On the Arthur Kill, Howland Hook Marine Terminal element, the Final Supplemental Environmental Impact Statement was filed with the Environmental Protection Agency on 16 September 1998. A Final Environmental Assessment for mitigation was issued in May 2001. The Record of Decision was executed on 29 August 2001.
- (4) On the 50-foot project, New York and New Jersey Harbor Deepening element, the final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency (EPA) on 29 December 1999. The Record-of-Decision was signed on 6 June 2002.

Division: North Atlantic

District: New York

New York & New Jersey Harbor, NY and NJ

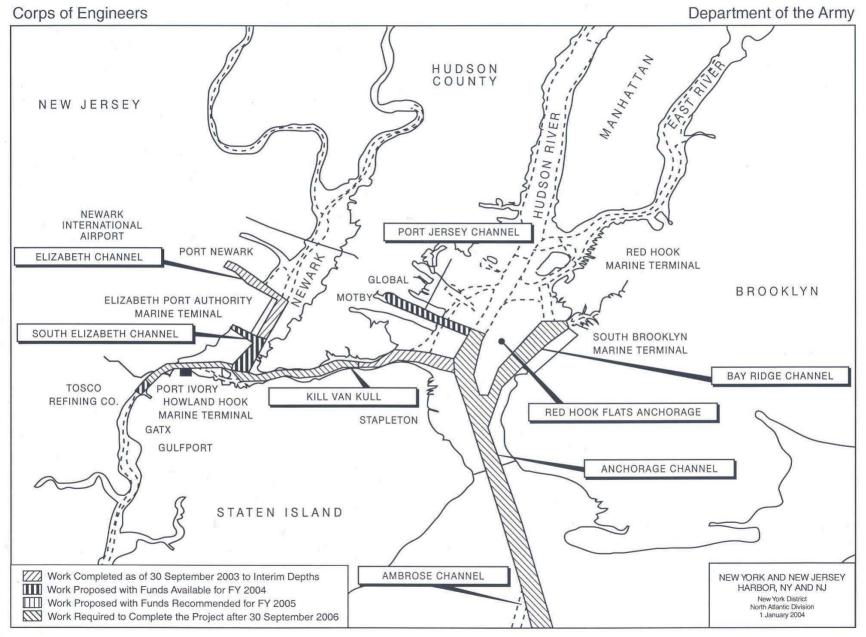
### OTHER INFORMATION:

- (1) All project elements were being funded separately prior to FY 2002. Congressional direction provided to the Secretary of the Army in the Energy and Water Development Appropriations, FY 2002, Conference Report consolidated the four project elements with the 50-foot deepening project authorized by the Water Resources Development Act of 2000. An updated Project Management Plan for the consolidated project was prepared in January 2003. This plan lays out the construction activities to consolidate ongoing interim depth construction with the overall deepening project. Critical to this analysis is the ongoing extensive close coordination with the States of New York and New Jersey, Port Authority of New York and New Jersey, the Environmental Protection Agency, US Coast Guard, and other interested agencies and public. Additional engineering and environmental analyses will be completed before extensive dredging of the 50-foot channels are undertaken. Individual opportunities to advance work, such as consolidated drilling and blasting in the Kill Van Kull channel which began in FY 2002 will be implemented.
  - (2) On the Kill Van Kull and Newark Bay Channels element, funds to initiate construction were appropriated in FY 1985.
- (3) On the NY Harbor and Adjacent Channels, Port Jersey Channel element, funds to initiate preconstruction engineering and design were appropriated in FY 1988 and funds to initiate construction were appropriated in FY 1994.
- (4) On the Arthur Kill, Howland Hook Marine Terminal element, funds for preconstruction engineering and design were appropriated in FY 1986 and funds to initiate construction were appropriated in FY 2001.
- (5) On the 50-foot New York and New Jersey Harbor Deepening element, funds to initiate preconstruction engineering and design were appropriated in FY 2000 and funds to initiate construction were appropriated in FY 2002.

Division: North Atlantic

District: New York

New York & New Jersey Harbor, NY and NJ



APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Norfolk Harbor and Channels (Deepening), Virginia (Continuing)

LOCATION: The project is located in Hampton Roads, Virginia, a 25-square mile natural harbor serving the ports of Norfolk, Newport News, Portsmouth, Chesapeake, and Hampton, Virginia.

DESCRIPTION: Programmed work encompasses (1) deepening a 2.5 mile section of the Southern Branch of the Elizabeth River from a depth of 35 feet to 40 feet, including an 800 foot turn basin, and (2) the construction of the 50-foot inbound element. Unprogrammed work encompasses deepening the outbound lanes of existing main channels to a depth of 55 feet, constructing a new ocean channel to a depth of 60 feet, and deepening a 6.3-mile section of the Southern Branch to a depth of 45 feet. Dredging the outbound channels to a depth of 50 feet was completed in 1988, the Lower Bay Beneficial Uses Study was completed in August 1994, and the construction of a 1500-foot diameter anchorage area with a depth of 50 feet was completed in September 1999. Dredging of the 50-Foot Inbound Element was initiated in August 2003 and continues.

AUTHORIZATION: Supplemental Appropriations Act of 1985 and Water Resources Development Act of 1986.

REMAINING BENEFIT-COST RATIO: 1.6 to 1 at 8 1/8 percent.

TOTAL BENEFIT-COST RATIO: 1.6 to 1 at 8 1/8 percent.

INITIAL BENEFIT-COST RATIO: 3.7 to 1 at 8 1/8 percent (FY 1985).

BASIS OF BENEFIT-COST RATIO: Benefits are from the General Design Memorandum approved in July 1986 at October 1986 price level and the Supplemental Engineering Report approved in August 1989 at October 1989 price level. Benefits for the 50-Foot Anchorage are from the Limited Reevaluation Report dated May 1996 at October 1996 price level. Benefits for the 50-Foot Inbound Element are from the Limited Reevaluation Report dated October 2002 at October 2002 price level.

Division: North Atlantic District: Norfolk Norfolk Harbor and Channels (Deepening), VA

SUMMARIZED FINANCIAL DATA				PHYSICAL
			PERCENT	COMPLETION
Estimated Appropriation Requirement (CoE)	137,400,000	STATUS	COMPLETE	SCHEDULE
Programmed Construction 33,012,000 Unprogrammed Construction 104,388,000		(1 Jan 2004)	100	Dec 1099
Unprogrammed Construction 104,388,000		50-Foot Outbound 50-Foot Outbound (Anchorage)	100 100	Dec 1988 Sep 1999
		50-Foot Inbound	30	TBD
		55-Foot Outbound	0	TBD
Estimated Appropriation Requirement (Coast Guard)	833,000	55-Foot Outbound (Anchorage)	0	TBD
Programmed Construction 306,000	033,000	Southern Branch 45-Foot	0	TBD
Unprogrammed Construction 527,000		Southern Branch 40-Foot	25	TBD
onprogrammed constituction 527,000		Entire Project	20	TBD
		Little i Tojest	20	100
			PHY	SICAL DATA
				H WIDTH LENGTH
Estimated Appropriation Requirement (US Navy)	3,508,000			et m.l.w.)(feet) (miles)
Programmed Construction 3,508,000	, ,		•	650 9.6 °
Unprogrammed Construction 0			Thimble Shoal	55 650 13.4
			Norfolk Harbor	55 650-800 8.4
Estimated Total Appropriation Requirement	141,741,000		Newport News	55 800 6.2
Programmed Construction 36,826,000			Elizabeth River and	d
Unprogrammed Construction 104,915,000				45 375-750 6.3
			Southern Branch	40 250-500 2.5
Future Non-Federal Reimbursement	11,362,000			
Programmed Construction 928,000				EPTH RADIUS
Unprogrammed Construction 10,434,000			ANCHORAGES	(feet m.l.w.) (feet)
			55-Foot	55 1,500
Estimated Federal Cost (Ultimate) (CoE)	126,038,000		Sewells Point	45 1,500
Programmed Construction 32,084,000			50-Foot	50 1,500
Unprogrammed Construction 93,954,000				
Fatimated Nam Fadaral Coat	120 201 000			
Estimated Non-Federal Cost	132,321,000			
Programmed Construction 31,941,000 Cash Contribution 27,045,000				
, ,				
, ,				
Reimbursements 928,000				

Division: North Atlantic District: Norfolk Norfolk Harbor and Channels (Deepening), VA

ACCUM.
PCT. OF EST.
FED COST

SUMMARIZED FINANCIAL DATA (Continued)

Estimated Non-Federal Cost (Continued)

Unprogrammed Construction 100,380,000

Cash Contribution 64,826,000 Other Costs 25,120,000 Reimbursements 10,434,000

Total Estimated Programmed Construction Cost
Total Estimated Unprogrammed Construction Cost
Total Estimated Project Cost

51,853,000
210,847,000
262,700,000

 Allocations to 30 September 2003
 24,847,000

 Conference Allowance for FY 2004
 3,000,000

 Allocation for FY 2004
 2,318,000
 1/

 Allocations Through FY 2003
 27,165,000
 18

 Allocation Requested for FY 2005
 1,000,000
 20

 Programmed Balance to Complete after FY 2005
 4,847,000

 Unprogrammed Balance to Complete after FY 2005
 104,388,000

1/ Reflects \$664,000 reduction assigned as savings and slippage, and \$18,000 rescinded in accordance with the FY 04 Energy and Water Development Appropriations Act

JUSTIFICATION: The existing channels in the Port of Hampton Roads are not deep enough to accommodate the increasing vessel sizes which transport principal commodities such as coal and grain. Hampton Roads coal terminals already receive colliers in excess of 100,000 deadweight tons which cannot sail fully loaded with the existing channels 50 feet deep, making unit transportation costs higher. When the project is completed, larger vessels will be able to load to capacity, providing a savings in the delivery of cargo to final destinations. The project will assist in improving the United States competitive position as a major coal exporter. The purpose of constructing the 50-Foot Inbound Channels is to prepare the port for the anticipated growth in the U.S. maritime container trade well into the next century and projected trend toward the utilization of increasingly larger container vessels. Average annual benefits are as follows:

Annual Benefits	Amount
Transportation Savings (50-Foot Inbound)	\$5,777,000
Transportation Savings (50-Foot Outbound)	\$26,400,000
Transportation Savings (55-Foot Outbound)	22,200,000
Transportation Savings (Southern Branch 45 foot)	3,499,000
Transportation Savings (Southern Branch 40 foot)	2,550,000
Total	\$60,426,000

Division: North Atlantic District: Norfolk Norfolk Harbor and Channels (Deepening), VA

FISCAL YEAR 2005: The requested amount will be applied as follows:

Construction (50 Foot Depth) \$1,000,000 Total \$1,000,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Annual Operation, Maintenance,

Payments Repair,

During Rehabilitation,

Construction and

and Replacement Reimbursements Costs

Requirements of Local Cooperation 50-Foot Outbound Element and Long-term Disposal:

·

Pay Craney Island dredged material disposal area tolls 642,000

Pay the costs of improvements to access channels and berthing areas (\$2,987,000) and relocate a 30 inch diameter water main (\$339,000).

30 inch diameter water main (\$339,000). 3,326,000

Pay 50 percent of the costs allocated to deep draft navigation greater than 45 feet during construction and pay 25 percent of the costs of incremental maintenance below 45 feet below mean low water.

pean low water. 9,545,000 150,000

Pay an additional 10 percent of the costs allocated to deep draft navigation within a period of 30 years following completion of construction (which is partially offset by relocation of the 30 inch diameter water main and a credit allowed for the Craney Island dredged material area tolls).

aney Island dredged material area tolls). 928,000

Subtotal Non-Federal Costs (50-Foot Outbound Element) \$14,441,000 \$150,000

Division: North Atlantic District: Norfolk Norfolk Harbor and Channels (Deepening), VA

NON-FEDERAL COST: (0	Continued)
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Requirements of Local Cooperation (Cont'd) 50-Foot Anchorage Element:	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay 50 percent of the costs allocated to deep draft navigation greater than 45 feet during construction and pay 25 percent of the costs of incremental maintenance below 45 feet below mean low water.	2,173,500	31,000
Pay an additional 10 percent of the costs allocated to deep draft navigation within a period of 30 years following completion of construction.	434,700	
Subtotal Non-Federal Costs (50-Foot Anchorage Element)	\$2,608,200	\$31,000

Division: North Atlantic District: Norfolk Norfolk Harbor and Channels (Deepening), VA

# NON-FEDERAL COST (Continued)

Requirements of Local Cooperation (Cont'd)  Remaining Elements:	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Trondining Liononic.		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	2,620,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary in the construction of the project.	22,500,000	
Pay 50 percent of the costs allocated to deep draft navigation greater than 45 feet during construction and pay 25 percent of the costs of incremental maintenance below 45 feet mean low water.	80,002,000	
Pay an additional 10 percent of the costs allocated to deep draft navigation within a period of 30 years following completion of construction.	10,434,000	
Subtotal Non-Federal Costs (Remaining Elements)	\$115,556,000	\$ 0
Total Non-Federal Costs	\$132,321,000	\$181,000
The near Federal energy has also agreed to make all required payments concurrently with project construction and reimburse its share of construction costs.		

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and reimburse its share of construction costs over a period of 30 years following completion of construction.

Division: North Atlantic District: Norfolk Norfolk Harbor and Channels (Deepening), VA

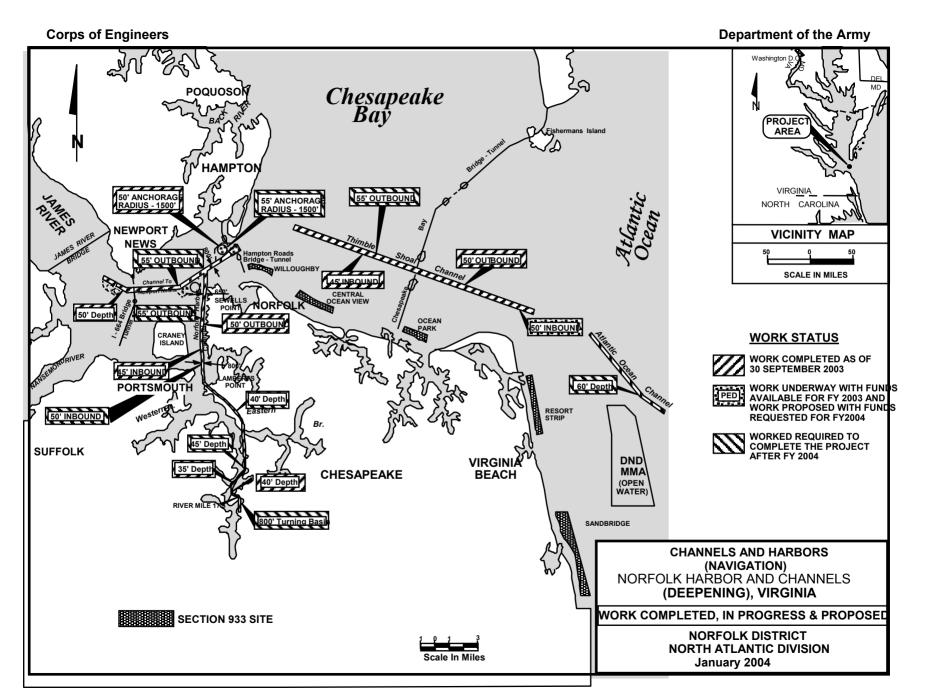
STATUS OF LOCAL COOPERATION: A Local Cooperation Agreement (LCA) for the first phase (50 foot Outbound) was executed 15 May 1986 with the Commonwealth of Virginia, and LCA Modification No. 1 was executed 13 February 1987 to reflect the criteria of the Water Resources Development Act of 1986. A Project Cooperation Agreement for the 50-Foot Anchorage was executed 19 February 1999 with the Commonwealth of Virginia. A Project Cooperation Agreement for the 50-Foot Inbound Element was executed on 23 April 2003 with the Commonwealth of Virginia. Supplements to the existing LCA will be executed to accommodate completion of future elements.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (CoE) cost estimate of \$137,400,000 is the same as the latest estimate (\$137,400,000) presented to Congress (FY 2003).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (FEIS) and Addendum were filed on 3 April 1981. A final Supplement I to the FEIS was filed on 14 June 1985. An Environmental Assessment for the 50-Foot Anchorage was completed in March 1996. Compliance with all environmental quality protection statutes relative to the construction of the 50-Foot Inbound Element was demonstrated as a result of coordination accomplished with the environmental agencies during the conduct of the Limited Reevaluation Report.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1985. Funds to initiate the 50-foot anchorage area were appropriated in FY 1998. The first phase of the project provided an outbound channel 50 feet deep. The remainder of the project will be programmed in coordination with local interests. A long-term dredged material management study was initiated in FY 1985. This study concentrated on the needs of the inner harbor and was completed in FY 1994.

Division: North Atlantic District: Norfolk Norfolk Harbor and Channels (Deepening), VA



APPROPRIATION TITLE: Construction, General – Beach Erosion Control

PROJECT: Delaware Coast Cape Henlopen to Fenwick Island, DE (Fenwick Island)

DESCRIPTION: This project is located along the Atlantic coast of Delaware State in Sussex County, for one mile just north of the Delaware-Maryland state border. The recommended hurricane and storm damage reduction project will consist of a beach berm 75 feet wide and 6,500 feet long at an elevation of +7.7 feet NAVD and a dune at an elevation of +17.7 feet NAVD. The initial beachfill will place an estimated 595,400 cubic yards of sand. Subsequent periodic nourishment, required every four years over the 50-year project life, will place 320,000 cubic yards of sand.

AUTHORIZATION: Water Resources Development Act of 2000

REMAINING BENEFIT-REMAINING COST RATIO: 2.1 to 1 at 6 3/8 percent

TOTAL BENEFIT-COST RATIO: 2.1 to 1 at 6 3/8 percent

INITIAL BENEFIT-COST RATIO: 2.1 to 1 at 6 3/8 percent (FY 2003)

BASIS OF BENEFIT-COST RATIO: Benefits (Oct 99 price level) are from the Chief of Engineers Report dated 29 December 2000.

SUMMARIZED FINANCIA	AL DATA:
Estimated Federal Cost	\$69,600,000
Initial Construction	\$ 4,866,000
Periodic Nourishment	\$ 64,734,000
Estimated Non-Federal C	Costs \$67,400,000
Initial Construction	\$ 2,620,000
Cash Contributions	\$2,619,000 .
Other Costs	\$ 1,000 .
Periodic Nourishment	\$ 64,780,000
Cash Contributions	\$64,780,000
Other Costs	0
Total Estimated Project C	
Initial Construction	\$ 7,486,000

\$129,514,000

Periodic Nourishment

	PHYSICAL	
STATUS:	PERCENT	COMPLETION
(1 Jan 2004)	COMPLET	E SCHEDULE
Initial Beachfill	0	TBD
Periodic Nourishment:	0	TBD
Entire Project:	0	TBD

#### PHYSICAL DATA:

Beachfill: Approximately 595,400 cubic yards initial construction; Dune grass and sand fencing; project length 6,500 feet Periodic Nourishment: every 4 years, 320,00 cubic yards; monitoring every year.

Division: North Atlantic District: Philadelphia Delaware Coast, Cape Henlopen to Fenwick Is, DE

		ACCUM. PCT. OF EST. FED COST
Allocations to 30 September 2003	\$ 514,000	
Conference Allowance for FY 2004	\$ 214,000	
Allocation for FY 2004	\$ 205,000 <u>1</u> /	
Allocations through FY 2004	\$ 719,000 ¯	1
Allocation Requested for FY 2005	\$ 2,500,000	5
Programmed Balance to Complete after FY 2005	\$ 1,647,000	
Unprogrammed Balance to Complete after FY 2005	\$64,734,000	

<sup>1/</sup> Reflects \$47,000 reduction assigned as savings and slippage, \$1,000 rescinded in accordance with the FY 04 Energy and Water Development Appropriations Act, and \$39,000 reprogrammed to the project.

JUSTIFICATION: The project area has been subject to major flooding, erosion and wave attack during storms, causing damage to structures, and, since 1992, twice resulting in the area being declared a National Disaster Area by the President of the United States. In recent years, continued erosion has resulted in a reduction of the height and width of the beachfront, which has increased the potential for storm damage. Efforts undertaken to minimize losses associated with storm damage include the efforts of the State to provide beachfill material over the years. However, many portions of the developed coast still remain vulnerable due to the proximity of structures to the ocean and the level of development. Storms of record that have caused significant damage occurred in August 1933, September 1944, and March 1962. The March 1962 coastal storm caused damage to 1,932 residences and 85 businesses along the Atlantic coast of Delaware. The total damage to the entire area was \$16,700,00 in 1962 prices. In addition, winter northeasters often buffet the coastline resulting in erosion and associated losses. In recent years the most notable of these occurred in December 1974, October 1977, March 1984, March 1989, October 1991, January 1992, December 1992, and January 1996. Damages from both the January 1992 and January 1996 storms were \$1,000,000 and \$700,000, respectively, along the Atlantic coast of Delaware. Average annual benefits are \$2,785,000 at an October 1999 price level.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue Initial Construction	\$2,275,000
Construction Management	\$ 225,000
Total	\$2,500,000

Division: North Atlantic District: Philadelphia Delaware Coast, Cape Henlopen to Fenwick Is, DE

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

	Payments during Construction and Reimbursement	Annual Operation, Maintenance, and Replacement Costs
Provide 35 percent of the initial construction costs, and bear all costs of operation, maintenance, and replacement of shoreline protection features.	\$2,619,000	\$5,000
Provide all lands, easements, rights-of-way, and relocations	\$ 1,000	
Provide during construction 50 percent of each periodic nourishment and monitoring cost.	\$64,780,000	
Total Non-Federal Cost	\$67,400,000	

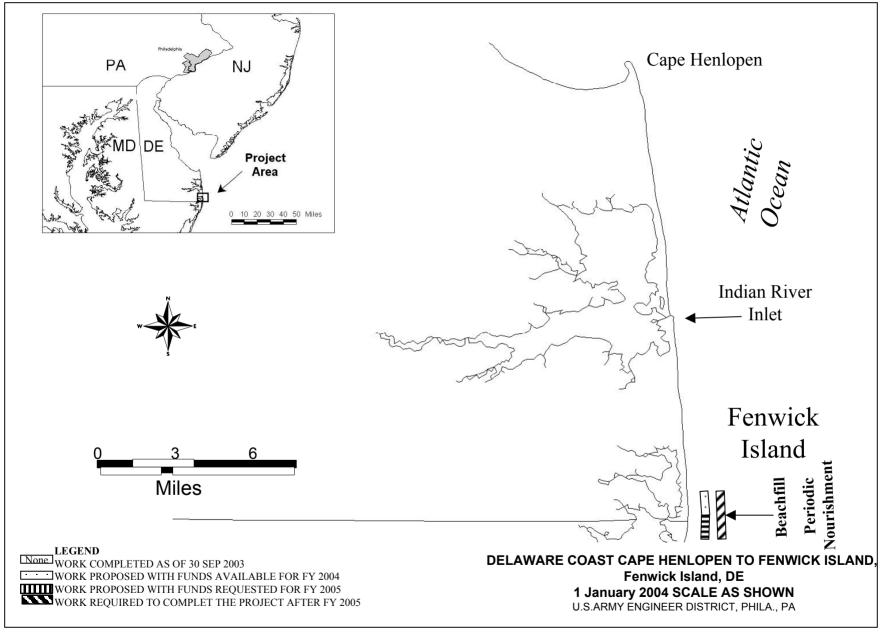
STATUS OF LOCAL COOPERATION: The project sponsor is the Delaware Department of Natural Resources and Environmental Control. The Project Cooperation Agreement (PCA) is anticipated to be executed by June 2004.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$69,600,000 is the initial estimate being submitted to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Record of Decision for the EIS was signed on August 28, 2002.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 2002. Funds to initiate construction were appropriated in FY 2003. The budget funds the initial construction phase of beach nourishment projects that reduce storm damages, but does not support follow-up renourishment work for such projects.

Division: North Atlantic District: Philadelphia Delaware Coast, Cape Henlopen to Fenwick Is, DE



APPROPRIATION TITLE: Construction, General – Beach Erosion Control

PROJECT: Delaware Coast, Rehoboth Beach to Dewey Beach, DE (Continuing)

LOCATION: The Rehoboth Beach to Dewey Beach project area stretches for approximately 2 miles along the northern part of the Atlantic Ocean coast of Delaware in Sussex County, Delaware. From north to south the project area includes the City of Rehoboth Beach, the unincorporated region in front of Silver Lake (under Sussex County jurisdiction), and the Town of Dewey Beach.

DESCRIPTION: The recommended project consists of providing 1.4 million cubic yards of initial beachfill, with subsequent nourishment of 277,000 cubic yards every three years. Berm widths will be 125 and 150 feet at an elevation of +8.0 feet NGVD for Rehoboth Beach and Dewey Beach respectively, with a dune at an elevation of +14.0 feet NGVD. The project length is 13,500 feet.

DLIVOIOAI

AUTHORIZATION: Water Resources Development Act of 1996 and Water Resources Development Act of 2000.

REMAINING BENEFIT-REMAINING COST RATIO: 1.9 to 1 at 6 1/8 percent

TOTAL BENEFIT-COST RATIO: 1.9 to 1 at 6 1/8 percent

Initial Construction

Periodic Nourishment \$119,830,000

INITIAL BENEFIT-COST RATIO: 1.9 to 1 at 6 1/8 percent (FY 2002)

\$ 16,170,000

BASIS OF BENEFIT-COST RATIO: Benefits (October 2001 price level) are from the Limited Reevaluation Report dated July 2002.

		PHYSICAL
STATUS:	PERCENT	COMPLETION
(1 Jan 2004)	COMPLETE	SCHEDULE
\$88,000,000 Initial Beachfill	0	TBD
,000 Periodic Nouris	shment 0	TBD
,000 Entire Project	0	TBD
\$48,000,000 PHYSICAL DA	TA:	
,000 Beachfill: Rehol	both Beach-125 fo	oot wide berm at an elevation of +8 feet NGVD and dune at
0 an elevation of	+14 feet NGVD: D	Dewey Beach-150 foot wide berm at an
0 elevation of +8 t	feet NGVD and du	une at an elevation
,000 of +14 feet NG\	/D: Dune grass, d	une fence
00 . Periodic Nouris	hment: every 3 ye	ears with a placement of approx. 277,000 cubic yards of
0 material.		
\$136,000,000		
) (	\$88,000,000 Initial Beachfill  9,000 Periodic Nouris  9,000 Entire Project  \$48,000,000 PHYSICAL DA  9,000 Beachfill: Reho  10 an elevation of  10 elevation of +8  10 of +14 feet NGV  10 Periodic Nouris  10 material	(1 Jan 2004) COMPLETE \$88,000,000 Initial Beachfill 0 ,000 Periodic Nourishment 0 ,000 Entire Project 0 \$48,000,000 PHYSICAL DATA: ,000 Beachfill: Rehoboth Beach-125 for an elevation of +14 feet NGVD: Description of +14 feet NGVD and description of +14 feet NGVD and description of +14 feet NGVD: Dune grass, description of the periodic Nourishment: every 3 years of the periodic Nourishment of the

Division: North Atlantic District: Philadelphia Delaware Coast, Rehoboth Beach to Dewey Beach, DE

ACCUMULATED PCT OF EST. FED. COST

Allocations to 30 September 2003	\$ 1,087,000	
Conference Allowance for FY 2004	\$ 5,768,000	
Allocation for FY 2004	\$ 500,000	
Allocations through FY 2004	\$ 343,000 1/	2
Allocations Requested for FY 2005	\$ 3,675,000	6
Programmed Balance to Complete after FY 2005	\$ 5,425,000	
Unprogrammed Balance to Complete after FY 2005	\$77,470,000	

<sup>1/</sup> Reflects \$1,277,000 reduction assigned as savings and slippage, \$34,000 rescinded in accordance with the FY 04 Energy and Water Development Appropriations Act, and \$4,114,000 reprogrammed from the project

JUSTIFICATION: The project area has been subject to major flooding, erosion and wave attack during storms, causing damage to structures, and, since 1992, twice resulting in the Rehoboth Beach/Dewey Beach area being declared a National Disaster Area. In recent years, continued erosion has resulted in a reduction of the height and width of the beachfront, including the virtual destruction of the existing dune system, which has increased the potential for storm damage. Storms of record that have caused significant damage occurred in August 1933, September 1944, and March 1962. Damages to 544 residences and 50 businesses, at an estimated cost of \$4 million, resulting from the March 1962 storm. In addition, winter northeasters often buffet the coastline resulting in erosion and associated losses. The most notable of these occurred in December 1974, October 1977, March 1984, March 1989, October 1991, January 1992, December 1992, and January 1996. Average annual benefits are \$4,006,000 (October 2001 price level).

FISCAL YEAR 2005 The requested amount will be applied as follows:

Continue initial beachfill \$ 3,573,000 Construction Management \$ 102,000 Total \$ 3,675,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and rights of way	\$ 1,336,000	\$ 66,000
Relocation utilities, roads, bridges and other facilities, where necessary for the construction of the project.	\$ 2,252,000	

Division: North Atlantic District: Philadelphia Delaware Coast, Rehoboth Beach to Dewey Beach, DE

NON-FEDERAL COST (continued)

Pay 35 percent of the initial costs allocated to hurricane and storm damage reduction & 35% of the cost of periodic nourishment.

\$ 44,412,000

**Total Non-Federal Costs** 

\$ 48,000,000

\$ 66,000

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the State of Delaware, Department of Natural Resources and Environmental Control. A Project Cooperation Agreement with the State of Delaware was executed on December 2003.

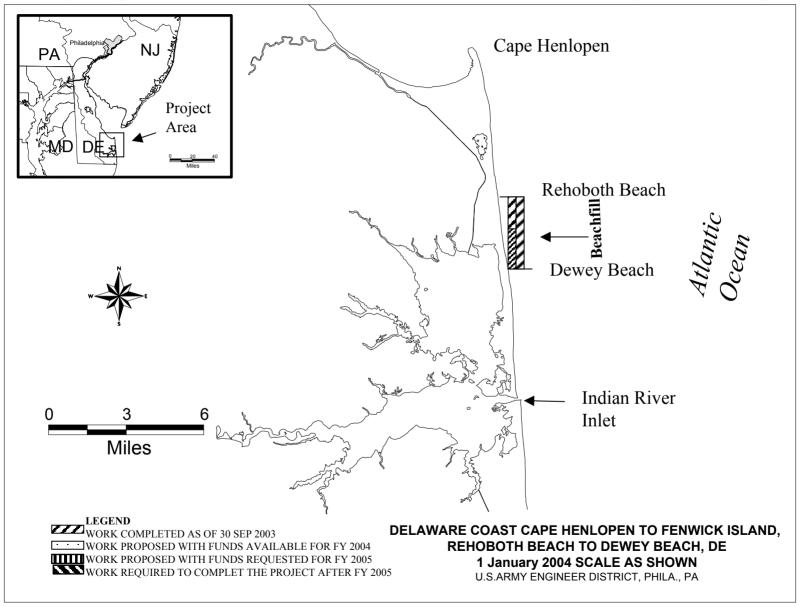
COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$88,000,000 is an decrease of \$22,000,000 from the latest estimate (\$110,000,000) presented to Congress (FY 2004). This change includes the following items:

Item Amount
Price Escalation on Construction Features \$ -22,000,000

Total \$ -22,000,000

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1998. Funds to initiate construction were appropriated in FY 2000. The budget funds the initial construction phase of beach nourishment projects that reduce storm damages, but does not support follow-up renourishment work for such projects.

Division: North Atlantic District: Philadelphia Delaware Coast, Rehoboth Beach to Dewey Beach, DE



APPROPRIATION TITLE: Construction, General – Beach Erosion Control

PROJECT: Brigantine Inlet to Great Egg Harbor Inlet, Brigantine Island, NJ

LOCATION: The project area is located on the ocean side, shore front of the barrier island, north of the city of Atlantic City, in Atlantic County, NJ.

DESCRIPTION: The beach fill project will extend from 15<sup>th</sup> Street North to 15<sup>th</sup> Street South, with an 800-foot taper on the northern end that runs into North Brigantine State Nature Area and an 1100 foot taper on the southern end that ends around 19<sup>th</sup> Street South. The total length of the project is 9,300 feet. The plan provides a 100-foot wide berm with a top elevation of +6.0 feet NAVD. On top of the berm from 9<sup>th</sup> Street North to 15<sup>th</sup> Street South, a dune will be constructed with a top elevation of +10 feet NAVD and a top width of 25 feet. The project will require approximately 648,000 cubic yards of sand for initial construction, with 312,000 cubic yards anticipated for periodic nourishment every 6 years over the 50-year project life. Dune grass planting and sand fencing are included in the project.

AUTHORIZATION: Section 101 (b) (12) of WRDA 1999.

REMAINING BENEFIT-REMAINING COST RATIO: 1.2 to 1 at 6 3/8 percent

TOTAL BENEFIT-COST RATIO: 1.2 to 1 at 6 3/8 percent

INITIAL BENEFIT-COST RATIO: 1.2 to 1 at 6 3/8 percent (FY 2003)

BASIS OF BENEFIT-COST RATIO: Benefits and costs (October 1998 price level) are based on the Chief of Engineers Report dated 06 December 1999.

		PHYSICAL
STATUS:	PERCENT	COMPLETION
(1 Ion 2004)	COMPLETE	CCHEDITIE

SUMMARIZED FINANCIAL DATA: (1 Jan 2004) COMPLETE SCHEDULE Estimated Federal Cost \$47.800.000 Initial Beachfill 0 TBD Initial Construction \$ 3,812,000 Periodic Nourishment: 0 TBD Periodic Nourishment \$ 43.988.000 Entire Project: TBD PHYSICAL DATA: Estimated Non-Federal Costs \$25,700,000

Initial Construction \$ 2,053,000 Beachfill: Approximately 648,000 cubic yards Initial construction; Dune grass & sand fencing; Project length 9,300 feet.

Other Costs \$ 43,000 Periodic Nourishment; every 6 years, 312,000 Cubic yards; monitoring every Periodic Nourishment \$ 23,647,000 year

riodic Nourishment \$23,647,000 Cash Contributions \$23,647,000

Other Costs 0

Division: North Atlantic

Total Estimated Project Cost \$73,500,000

Initial Construction \$5,865,000 Periodic Nourishment \$67,635,000

District: Philadelphia Brigantine Inlet to Great Egg Harbor Inlet, Brigantine Island, NJ

SUMMARIZED FINANCIAL DATA:(continued)		ACCUM. PCT. OF EST. FED COST
Allocations to 30 September 2003	\$ 863,000	
Conference Allowance for FY 2004	\$ 500,000	
Allocation for FY 2004	\$ 386,000 <u>1</u> /	
Allocations through FY 2004	\$ 1,249,000	3
Allocation Requested for FY 2005	\$ 2,000,000	7
Programmed Balance to Complete after FY 2005	\$ 563,000	
Unprogrammed Balance to Complete after FY 2005	\$ 43,988,000	

<sup>1/</sup> Reflects \$111,000 reduction assigned as savings and slippage and \$3,000 rescinded in accordance with the FY 04 Energy and Water Development Appropriations Act.

JUSTIFICATION: Significant storm damage caused by high tides and large waves has degraded the quality of the municipal beach. Coastal erosion has limited the capacity of the beach to protect structures from flooding, northeasters and hurricanes. The proposed project will consist of a wider berm and raised dune to protect the municipality from storm damage associated with coastal flooding, erosion and inundation. The plan will also provide increased recreational area while providing suitable habitat for nesting shorebirds and endangered coastal plant species. Average annual benefits are \$1,024,000 (Oct. 1998 price level).

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue Construction	\$1,840,000
Construction Management	\$ 160,000
Total	\$2,000,000

Division: North Atlantic District: Philadelphia Brigantine Inlet to Great Egg Harbor Inlet, Brigantine Island, NJ

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

Payments during Construction and Reimbursement

Annual Operation, Maintenance, and Replacement Costs

Provide 35 percent of the initial construction costs.

\$ 2,010,000

Provide all lands, easements, rights-of-way, and relocations

\$ 43,000

Provide during construction 35 percent of each periodic nourishment and monitoring cost.

\$23.647.000

Bear all costs of operation, maintenance, repair, replacement, and rehabilitation of the completed project.

\$19,000

Total Non-Federal Cost \$25,700,000 \$19,000

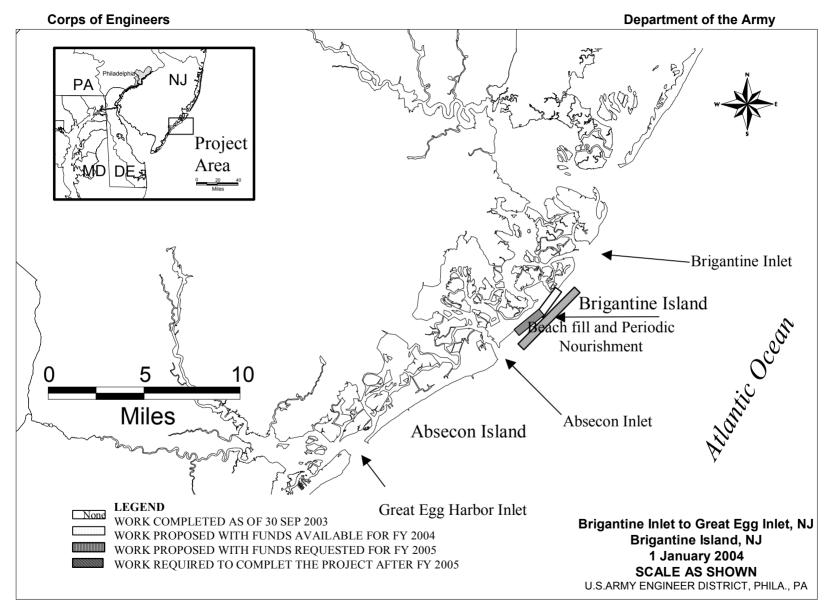
STATUS OF LOCAL COOPERATION: The New Jersey Department of Environmental Protection is the non-Federal sponsor. The Project Cooperation Agreement (PCA) is anticipated to be executed by May 2004.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$47,800,000 is the initial estimate being submitted to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Record of Decision for the EIS was signed 15 December 2000.

OTHER INFORMATION: Funds to initiate preconstruction, engineering and design were appropriated in FY 2002. Funds to initiate construction were appropriated in FY 2003. The budget funds the initial construction phase of beach nourishment projects that reduce storm damages, but does not support follow-up renourishment work for such projects.

Division: North Atlantic District: Philadelphia Brigantine Inlet to Great Egg Harbor Inlet, Brigantine Island, NJ



2 February 2004

APPROPRIATION TITLE: Construction, General – Navigation Mitigation, Ecosystem Restoration, Hurricane & Storm Damage Reduction

PROJECT: Lower Cape May Meadows, Cape May Point, NJ (Continuing)

LOCATION: Project area includes Lower Cape May Meadows and the Borough of Cape May Point and extends some 2 miles along the southern Atlantic coast of New Jersey.

DESCRIPTION: The plan consists of a dune/berm 20 feet wide extending for a total length of 10,050 feet; planting of 18 acres of dune vegetation; seaward restoration of 35 acres of emergent wetland; elimination of 95 cares of the nuisance plant Phragmites australis; planting of 105 acres of wetland vegetation; creation of drainage ditches; installation of two weir-flow control structures; creation of six fish reservoirs; and construction of elements to create 25 acres of tidal marsh. The project also includes 650,00 cubic yards of periodic nourishment every 4 years over the 50-year project life, and monitoring and adaptive management over a 5-year period for the Lower Cape May Meadows freshwater wetlands restoration element.

AUTHORIZATION: Section 101 (a) (25) of WRDA 1999.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

INITIAL BENEFIT-COST RATIO: Not applicable

BASIS OF BENEFIT-COST RATIO: Benefits and costs (October 1998 price level) are based on the Chief of Engineers Report dated 05 April 1999.

				PHYSICAL
SUMMARIZED FINANCIAL DATA:		STATUS: PER	RCENT	COMPLETION
		(1 Jan 2004) COM	IPLETE	SCHEDULE
Estimated Federal Cost	\$ 121,900,000	Initial Beachfill	0	TBD
Initial Construction \$ 11,856,000		Fish & Wildlife	0	TBD
Periodic Nourishment \$110,044,000		Entire Project	0	TBD
Estimated Non-Federal Cost	\$ 33,500,000	PHYSICAL DATA		
Initial Cost \$3,920,000		Dune/berm: 20 feet wide	e; total leng	th 10,050 ft
Cash Contribution \$ 3,771,000		Plantings: 158 acres of	dune, emer	gent wetland and wetland
Other \$ 149,000		Creation of Weir-flow Co	ontrol Struc	tures and fish reservoirs; New tidal
Periodic Nourishment \$26,580,000		marsh: 25 acres		
Cash 26,580,000		Monitoring and adaptive	e managem	ent: 5 years
Total Estimated Project Cost	\$ 152,400,000	Periodic Nourishment:	4 year cycle	e for 50 years with monitoring

Division: North Atlantic District: Philadelphia Lower Cape May Meadows, Cape May Point, NJ

ACCUM. PCT. OF EST. FED COST

## SUMMARIZED FINANCIAL DATA (continued)

Allocations to 30 September 2003 \$ 1,188,000
Conference Allowance for FY 2004 \$ 2,000,000
Allocation for FY 2004 \$ 119,000 1/

Allocations through FY 2004 1,307,000 1
Allocation Requested for FY 2005 \$ 5,164,000 5

Programmed Balance to Complete after FY 2005 \$ 5,385,000 Unprogrammed Balance to Complete after FY 2005 \$110,044,000

1/ Reflects \$443,000 reduction assigned as savings and slippage, \$12,000 rescinded in accordance with the FY 04 Energy and Water Development Appropriations Act, and \$1,426,000 reprogrammed from the project

JUSTIFICATION: Lower Cape May Meadows has been severely impacted by shoreline erosion linked to the Federal navigation project at Cape May Inlet completed in 1911. Erosion has resulted in the direct loss of beach and unique freshwater wetland habitat. Erosion to the dune system has left the remaining freshwater ecosystem in The Meadows substantially degraded through saltwater intrusion and subsequent topographical alteration by allowing oceanwater overtopping during storm events. Since 1991, the dunes protecting the wetlands have been breached six times, resulting in saltwater intrusion to the freshwater wetlands. Very few plant or animal species have the adaptations needed to survive such large fluctuations or range of salinities (freshwater to saltwater). The saltwater intrusion has also encouraged the subsequent proliferation of the nuisance plant species Phragmites australis, also know as common reed. These conditions have significantly reduced the ability of the wetlands to support the wildlife and endangered plant species which reside there. It is estimated that an additional 147 acres of habitat will be by the year 2050 if shoreline erosion is to continue unabated.

Compounding the problem is the hydraulic/hydrologic relationship between Lower Cape May Meadows and the communities of Cape May Point and West Cape May. Lower Cape May Meadows serves as a buffer during storms between the ocean and the surrounding developed areas. When the Meadows area is inundated during storm events, the flood waters flow into Cape May Point and the developed portions of Lower Township and West Cape May, flooding the low lying areas of these towns.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue initial construction \$4,700,000 Planning, Engineering and Design \$100,000 Construction Management \$364,000

Total \$5,164,000

Division: North Atlantic District: Philadelphia Lower Cape May Meadows, Cape May Point, NJ

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

Payments during Construction and Reimbursement \$ 149,000 Annual Operation, Maintenance, and Replacement Costs

Provide all lands, easements, rights-of-way, and relocations.

Provide 35 percent of the initial construction costs assigned to the non-mitigation portion of the project for hurricane and storm damage reduction and, for the impacts attributable to Federal navigation works, share in the costs in the same proportion as the cost sharing provisions applicable to the project causing the erosion impacts (76 percent of project costs assigned to mitigation of jetty impacts).

\$ 33,351,000

Total Non-Federal Cost \$33,500,000

STATUS OF LOCAL COOPERATION: The NJDEP is the non-Federal sponsor. The Project Cooperation Agreement (PCA) was executed in July 2003.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$121,900,000 is a decrease of \$30,100,000 from the latest estimate (\$152,000,000) presented to Congress (FY 2004). This change includes the following items:

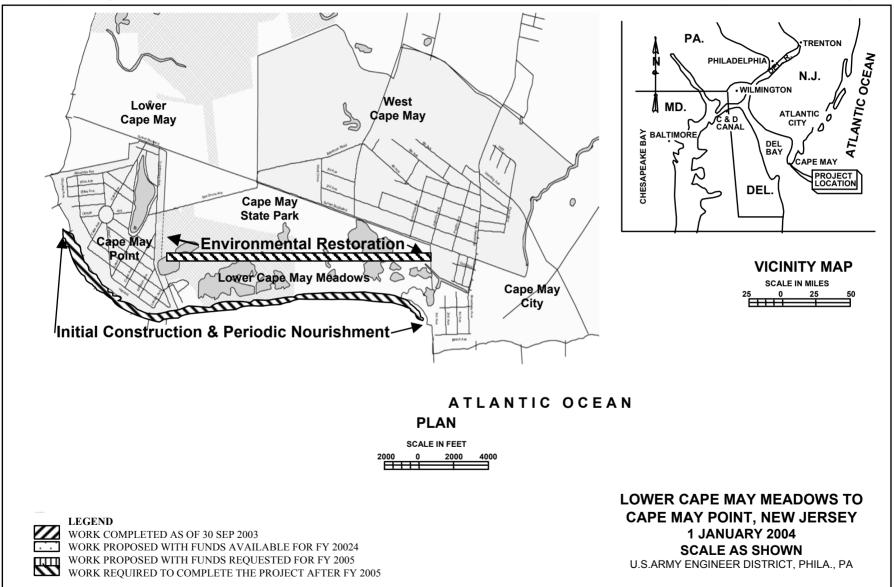
Price Escalation On Construction Features - \$30,100,000 Total - \$30,100,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Assessment was completed in November 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1999. Funds to initiate construction were appropriated in FY 2002. The budget funds the initial construction phase of beach nourishment projects that reduce storm damages, but does not support follow-up renourishment work for such projects.

Division: North Atlantic District: Philadelphia Lower Cape May Meadows, Cape May Point, NJ

Corps of Engineers Department of the Army



APPROPRIATION TITLE: Construction, General – Shoreline Protection

PROJECT: Townsends Inlet to Cape May Inlet, New Jersey (Continuing)

LOCATION: The site of the recommended project is located on the Atlantic Coast of New Jersey, approximately 23 miles southwest of Atlantic City. It includes the communities of Avalon, Stone Harbor, and North Wildwood.

DESCRIPTION: The recommended project consists of five reaches for shoreline protection for Avalon, Stone Harbor and North Wildwood, NJ, and an environmental restoration project for Stone Harbor Point. The shoreline protection portion of the project includes: (1) the construction of stone seawalls for the first and second reaches at the inlet frontages at Avalon and North Wildwood with seawalls at top elevations of 14 feet and 13 feet above mean low water respectively, extending for approximately 2,970 linear feet in Avalon and 8,660 linear feet in North Wildwood and would encompass the existing non-Federal bulkheads, rock revetments, and seawalls; and (2) the placement of 4.6 million cubic yards of initial beachfill with 800,000 cubic yards of periodic nourishment every three years for the third and fourth reaches for the oceanfronts of Avalon and Stone Harbor (Seven Mile Island). The beach fill segments will provide berm widths of 150 feet at elevation 8.5 feet above mean low water. The dunes would have a total length of 22,500 feet, a crest width of 25 feet, and would include dune grass plantings and sand fencing. The ecosystem restoration portion of the project includes an oceanfront berm 150 feet wide with a crest width of 25 feet at elevation 8.5 feet above mean low water for the fifth reach at Stone Harbor Point. This berm would extend 1,000 linear feet southwest of the terminal groin in Stone Harbor. The plan also includes the planting of approximately 3 acres of dune grass and 64 acres of bayberry and eastern red cedar. No periodic nourishment would be included with this project feature.

AUTHORIZATION: Water Resource Development Act 1999, Section 101(a)(26).

REMAINING BENEFIT-REMAINING COST RATIO: 1.8 to 1 at 6 7/8 percent.

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 6 7/8 percent

INITIAL BENEFIT-COST RATIO: 1.8 to 1 at 6 7/8 percent (FY 2001)

BASIS OF BENEFIT-COST RATIO: Townsends Inlet to Cape May Inlet feasibility study. Chief's Report dated 28 September 1998

Division: North Atlantic District: Philadelphia Townsends Inlet to Cape May Inlet, NJ

**PHYSICAL** 

SUMMARIZED FINANCIAL DATA	STATUS:	PERCE	NT	COMPLETION
	(1 Jan 2004)	COMPL	ETE	SCHEDULE
Estimated Federal Cost \$ 236,000,000	Initial Beachfill	•	100	Sept 2003
Initial Construction 47,600,000	Periodic Nourish	nment	0	TBD
Periodic Nourishment 188,400,000	Seawalls		0	TBD
Estimated non-Federal Cost \$ 128,000,000	Ecosystem Rest	oration	0	TBD

Initial Construction 26,438,000 Entire Project

Cash Contributions 24,747,000
Other Costs 1,691,000
Periodic Nourishment 101,562,000
Cash Contributions 101,562,000

Other Costs 0

Total Estimated Project Cost \$ 364,000,000

Initial Construction 74,038,000 Periodic Nourishment 289,962,000 PHYSICAL DATA: Stone Harbor Point: 4.3 miles of beachfill, berm width of 150-foot and dune height of +16-feet. Avalon and Stone Harbor 2.2 miles of seawall construction. Stone Harbor Point: Ecosystem restoration of approximately

107 acres of natural barrier island with beach fill and dune construction with periodic

nourishment and planting of 67 acres of bayberry and red cedar roosting habitat

TBD

**ACCUMULATED** PCT OF EST. Allocations to 30 September 2003 \$ 17,575,000 FED. COST Conference Allowance for FY 2004 \$ 9,200,000 Allocation for FY 2004 \$ 5.564.000 1/ Allocations through FY 2004 \$ 23,139,000 10 Allocations Requested for FY 2005 \$ 12,600,000 15 Programmed Balance to Complete after FY 2005 \$ 11,861,000 Unprogrammed Balance to Complete after FY 2005 \$188,400,000

1/ Reflects \$2,036,000 reduction assigned as savings and slippage, \$54,000 rescinded in accordance with the FY 04 Energy and Water Development Appropriations Act, and \$1,546,000 reprogrammed from the project due to needs.

JUSTIFICATION: The area has been subjected to major flooding, erosion and wave attack during storms, causing damage to structures, and, since 1992, was declared a National Disaster Area by the President of the United States on three separate occasions. In recent years, continued erosion has resulted in a reduction of the height and width of the beachfront, which has increased the potential for storm damage. In addition, valuable fish and wildlife habitat along the southern end of Stone Harbor has been lost to erosion.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue initial construction \$10,700,000
Planning, Engineering and Design
Construction Management \$1,530,000
Total \$12,600,000

Division: North Atlantic District: Philadelphia Townsends Inlet to Cape May Inlet, NJ

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and rights of way	\$ 101,000	
Modify or relocate utilities, roads, bridges, Other facilities, where necessary for the construction of the project.	\$ 1,590,000	
Pay 35 percent of all the costs allocated to hurricane and storm damage reduction and ecosystem restoration	\$ 24,747,000	
Pay 35 percent of the cost of periodic nourishment	\$ 101,562,000	
Total Non-Federal Costs	\$ 128,000,000	

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the State of New Jersey Department of the Environmental Protection (NJDEP). The Project Cooperation Agreement was executed in March 2002.

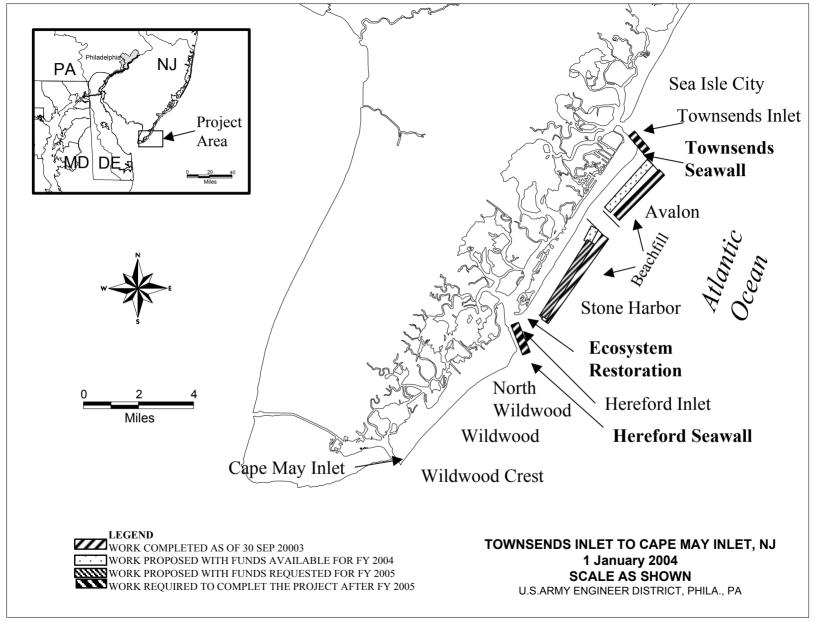
COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$236,000,000 is a decrease of \$72,00,000 from the latest estimate (\$308,000,000) presented to Congress (FY 2004). This change includes the following items:

Item Amount
Price Escalation on Construction Features - \$ 72,000,000
Total - \$ 72.000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was completed in March 1997.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1997. Funds to initiate construction were appropriated in FY 2001. The budget funds the initial construction phase of beach nourishment projects that reduce storm damages, but does not support follow-up renourishment work for such projects.

Division: North Atlantic District: Philadelphia Townsends Inlet to Cape May Inlet, NJ



APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Fire Island Inlet to Montauk Point, New York (Continuing)

LOCATION: The overall project area, extends from Fire Island Inlet easterly to Montauk Point along the Atlantic Coast of Suffolk County. The project is about 83 miles long and comprises about 70 percent of the total ocean frontage of Long Island. Fire Island Inlet is located about 50 miles by water East of the Battery, New York City.

DESCRIPTION: The project provides for beach erosion control and hurricane protection along five reaches of the Atlantic Coast of New York from Fire Island Inlet to Montauk Point. Work includes widening the beaches along the developed areas to a minimum width of 100 feet at an elevation of 14 feet above mean sea level and by raising dunes to an elevation of 20 feet above mean sea level from Fire Island Inlet to Hither Hills State Park and at Montauk and opposite Lake Montauk Harbor, supplemented by grass planting on the dunes, interior drainage structures, construction of up to 50 groins, and subsequent periodic beach nourishment. A reformulation study is underway to evaluate storm damage protection measures. An interim project at Westhampton Beach has been constructed prior to completion of an ongoing overall project reformulation effort. This interim project provides for 30 years of periodic nourishment to maintain a beach berm extending westwardly from Groin 15 to Moriches Inlet at an elevation of 9.5 feet above mean sea level backed by a dune with a height of +15 feet above msl. The Westhampton Beach Interim project also includes tapering of the existing westernmost two groins, construction of a new groin between groins 14 and 15, and beachfill as necessary within the existing groinfield to promote sand transport. A Breach Contingency Plan has been developed which permits closing of breaches of the barrier island with use of a pre-approved Project Cooperation Agreement format, provided that estimated breach costs are no greater than \$5 million. A Decision document was finalized and approved in July 2002 for an interim project to protect the area west of Shinnecock Inlet. This interim project provides for initial beachfill which is expected to be initiated in September 2004, followed by six years of periodic nourishment. The study for an interim project along Fire Island has been deferred due to lack of a Non-Federal sponsor.

AUTHORIZATION: River and Harbor Act 14 July 1960, modified by the Water Resources Development Act of 1974, the Water Resources Development Act of 1986, and the Water Resources Development Act of 1992.

REMAINING BENEFIT-REMAINING COST RATIO: 2.6 to 1 at 2 5/8 percent.

TOTAL BENEFIT-COST RATIO: 2.6 to 1 at 2 5/8 percent.

INITIAL BENEFIT-COST RATIO: 2.6 to 1 at 2 5/8 percent (FY 1963).

Division: North Atlantic District: New York Fire Island Inlet to Montauk Point, NY

SUMMARIZED FINANCIAL DATA		STATUS: (1 Jan 2004)	PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Federal Cost	591,100,000	Reach 2	COMPLETE	SCHEDOLL
	100,000	11 groins	100	Oct 1966
Initial Construction 67,000,000	*	4 groins	100	Nov 1970
Periodic Nourishment 87,100,000		8 groins	0	100 1970 1/
	,	Westhampton Interim	•	
University A27	000 000			
	000,000	Initial Construction	100 10	Dec 1997
, ,		Periodic Nourishment		
Periodic Nourishment 323,600,000		Balance of Reach	0	<u>1</u> /
		Reach 4	400	0 4005
		2 groins	100	Sep 1965
		Beach Fill-18.4 mi.	0	<u>1</u> /
Estimated Non-Federal Cost	295,200,000	Balance of Project		
Programmed Construction 58,	700,000	Dune/Beach Fill-39.7 r	mi 0	1/
Initial Construction 19,500,000	700,000	27 groins	0	<u>1</u> / <u>1</u> /
Cash Contributions 18,800,000		27 9101113	U	<u></u> /
Other Costs 700,000				
Periodic Nourishment 39,200,000		Reformulation Study	60	TBD
Cash Contribution 39,200,000		Reioinidiation Study	00	TBD
		Ctudios for Interim Proj	aata	
Other Costs 0		Studies for Interim Proj		2/
Handana and Operational Construction	000 500 000	Fire Island	90	<u>2</u> /
Unprogrammed Construction	236,500,000	West of Shinnecock	100	Dec 2002
Initial Construction 61,100,000		Beach Contingency Plan	100	Jan 1996
Cash Contributions 48,850,000				
Other Costs 12,250,000		1/ Schedule is dependent on the	e outcome of the	e Reformulation effort.
Periodic Nourishment 175,400,000				
Cash Contribution 175,400,000		2/ Study terminated due	to lack of a nor	n-federal sponsor and
unresolved				
Other Costs 0		environmental issues th	at will be addre	ssed in the overall
Total Estimated Programmed Construction	212,800,000	reformulation effort		
Initial Construction 86,500,000		PHYSICAL DATA		
Periodic Nourishment 126,300,000		Dunes and beach replenishmen		
		Dunes: raise to elevation 20 fee		
		Beaches: widen to a mi		
		Interior drainage structures: 3 ga	ated culverts	
		Groins: 52		
		Periodic nourishment: 480,000		
Division: North Atlantic		District: New York	Fire Island Inle	et to Montauk Point, NY

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SUMMARIZED FINANCIAL DATA (Contd.)
Total Estimated Unprogrammed Construction Cost 673,500,000

Initial Construction 174,500,000 Periodic Nourishment 499,00,000

Total Estimated Project Cost 886,300,000

Initial Construction 261,000,000 Periodic Nourishment 625,300,000

Allocations to 30 September 2003

Conference Allowance for FY 2004

Allocation for FY 2004

Allocations Through FY 2004

Allocation Requested for FY 2005

65,871,000

3,800,000

2,636,000 1/

68,507,000

6,600,000

Programmed Balance to Complete

After FY 2005 78,993,000

**Unprogrammed Balance to Complete** 

After FY 2005 437,000,000

1/ Reflects \$841,000 reduction assigned as savings and slippage, \$23,000 rescinded in accordance with the FY 04 Energy and Water Development Appropriations Act, and \$300,000 as funds reprogrammed out.

12

13

JUSTIFICATION: Erosion has seriously reduced the width of the shoreline in the study area with consequent exposure of the shore and the mainland to wave attack and inundation damages. A recurrence of the hurricane tide of record (September 1938) when 45 lives were lost, would cause inundation and wave damage estimated at \$717,000,000 (April 1996 price levels). As a result of the 11 December 1992 storm, in the Westhampton area (Section 1B of Reach 2), over 200 residential structures were destroyed and two breaches of the barrier island occurred. Closure costs for these breaches in 1992 was approximately \$6,600,000.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue West of Shinnecock initial construction 2,400,000 Continue Contract # 2 (Westhampton Beach) 4,200,000

Total \$ 6,600,000

Division: North Atlantic District: New York Fire Island Inlet to Montauk Point, NY

NON-FEDERAL COSTS: Local interests are required to bear 30 percent of the total project cost including periodic nourishment, for the Westhampton Interim project and 35 percent of the total project cost for the Reformulation project, which includes the value of lands, easements, and rights-of-way.

Requirements of Local Cooperation:	Payments During Construction and Reimbursements	Annual Operation Maintenance and Replacement Costs
Provide all lands, easements, and rights-of-way, and relocations.	\$ 12,950,000	
Pay 30 percent of the first costs for the Westhampton Interim project and 35 percent of the first costs for the remainder of the project including creditable lands and easements and rights of way, and bear all costs of operation and maintenance and replacement of storm damage reduction facilities.	67,650,000	
Pay 35 percent of the periodic nourishment cost	214,600,000	
Total Non-Federal Costs	\$ 295,200,000	\$0

STATUS OF LOCAL COOPERATION: The agency responsible for local cooperation is the New York State Department of Environmental Conservation (NYSDEC). Assurances of local cooperation were executed by the NYSDEC on 14 August 1963 and accepted by the Federal Government on 20 August 1963. A project cooperation agreement (PCA) for the Westhampton Interim project was executed in February 1996. A PCA for the West of Shinnecock project was executed in December 2003.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$591,100,000 is an increase of \$ 18,200,000 from the latest estimate (\$572,900,000) presented to Congress (FY 2004). This change includes the following items:

Item Amount
Price Escalation on Construction Features \$ 18,200,000

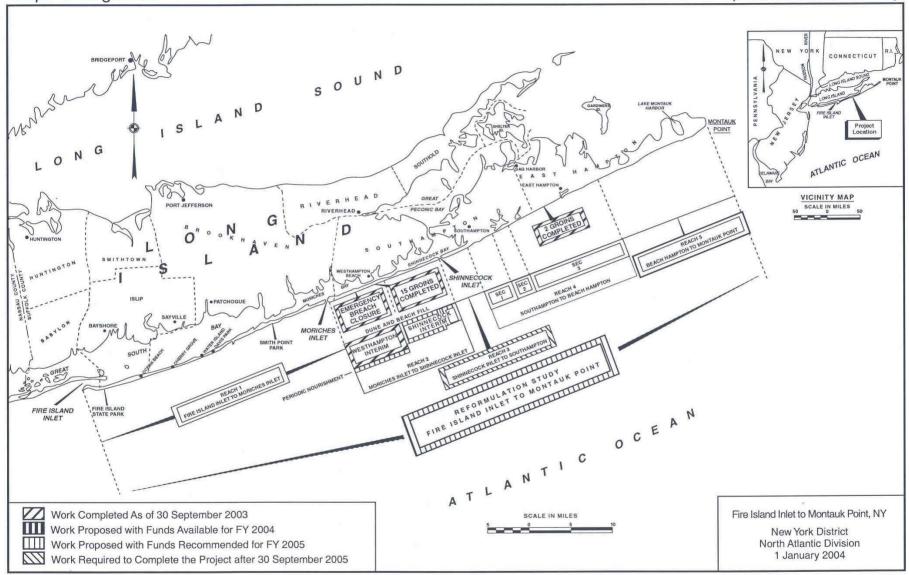
Total \$ 18,200,000

Division: North Atlantic District: New York Fire Island Inlet to Montauk Point, NY

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency (USEPA) on 28 January 1978. On 7 March 1978, the Department of the Interior (DOI), supported by other agencies referred the EIS to the Council on Environmental Quality (CEQ) as unacceptable. Subsequent to the strong objections on the projects final environmental impact statement, meetings were held between September 1978 and January 1980 with DOI, USEPA, U.S. Department of Commerce, and NYSDEC. Two public scoping meetings were held in October 1979. Subsequently, the Federal agencies agreed to a basis for the reformulation of the Fire Island to Montauk Point project, including a general agreement on the studies necessary to answer the outstanding concerns. An environmental analysis was included in Supplement No. 2 to GDM No. 1 to determine environmentally acceptable measures of beach protection for the critically eroded areas at Westhampton Beach.

OTHER INFORMATION: Initial planning and construction funds were appropriated in FY 1963. The work remaining to be done is completion of construction of Reach 2-Moriches Inlet to Shinnecock Inlet, Reach 4-Southhampton to Beach Hampton, initiation of construction of Reach 1-Fire Island Inlet to Moriches Inlet, Reach 3-Shinnecock to Southhampton, and Reach 5-Beach Hampton to Montauk, as well as the completion of the reformulation effort. The Corps of Engineers concurred with the request by the State of New York to initially construct 11 groins (Reach 2), and 2 groins (Reach 4) with beach fill to be added as necessary but not sooner than 3 years after groin completion. In recognition of the critical condition of the beaches due to earlier storms, the Corps recommended to the State in June 1967 that the 3 year observation period be waived and that construction of urgent hurricane protection be resumed. The State concurred and requested that work be undertaken on additional groins, replacement of beach fill and dunes in Reach 2, as well as construction of groins, drainage structures and dune fill in Reach 4. Suffolk county, however, did not endorse the placement of beach and dune fills. Continuing negotiations during FY 1969 resulted in agreement on a plan for construction for certain groins, drainage structures, beach fill, and dunes to an interim height of 16 feet in Reaches 2 and 4. In December 1973, the State requested planning for Reach 2 (Section 1b), (Westhampton Beach) and Reach 4 (Georgica Pond), indicating that it would provide funds. Planning resumed and assurances were requested from the State in October 1974. However, strong opposition developed with Suffolk County and the county legislature refusing to provide support. Subsequently, erosion of the shoreline downdrift of the groin field at Westhampton Beach accelerated to the point where Dune Road, the only access to the homes in this area, was under water during normal high tide. In December 1992, two breaches occurred in the barrier island near Westhampton Beach, which were subsequently closed. An interim plan for the severely eroded Westhampton Beach area was prepared in June 1994, which provides for a lower level of protection than that provided in the original authorization. This interim plan has been designed such that it could be modified based on future recommendations in the to-be-completed Reformulation study. The USEPA and DOI agreed in concept to the interim plan, provided that a full environmental assessment and/or environmental impact study was completed, and the reformulation of the overall project was reinstated. The estimated cost of the reformulation effort is \$24 million. The reformulation study completion date is being determined, the planning engineering and design has been completed for an interim project to address the severely eroded shoreline west of Shinnecock Inlet. An interim plan for Fire Island barrier island has been deferred due to the lack of a non-federal sponsor and environmental concerns which will be addressed during the reformulation study. The cost of these interim studies is \$4 million. Additionally, a Breach Contingency Plan was approved in January 1996 to provide for rapid response to breaches along the islands while awaiting completion of the reformulation study. In 1984, a lawsuit was brought against Suffolk County, the State of New York and the United States of America, which claimed that the groinfield constructed in the early 1960's caused erosion and damage to downdrift properties. In October 1994, the Village of West Hampton Dunes intervened and a settlement agreement was reached between the plaintiffs and the county, state and Federal governments to provide for storm damage protection as described in the Corps 1995 Decision Document, which included periodic nourishment for a period of 30 years

Division: North Atlantic District: New York Fire Island Inlet to Montauk Point, NY



APPROPRIATION TITLE: Construction General - Local Protection (Flood Control)

PROJECT: Passaic River Preservation of Natural Storage Areas, New Jersey (Continuing)

LOCATION: The project is located in Morris, Essex and Passaic Counties, New Jersey

DESCRIPTION: This project element involves the acquisition of 5,350 acres of natural floodplain storage areas in the Central Passaic River Basin to preserve them from future development. This measure is a flood damage reduction element that will prevent increases in flood flows that would be caused by the loss of these areas to new development. This acquisition, in conjunction with nearly 16,000 acres already protected under existing Federal and State programs, will help preserve the flood storage and environmental characteristics of the Central Basin wetlands.

AUTHORIZATION: Water Resources Development Act of 1990, Section 101(a)(18) as modified by Section 102(p) of WRDA 1992, Section 333 of WRDA 1996, and Section 327 of WRDA 2000.

REMAINING BENEFIT-REMAINING COST RATIO: 1.2 to 1 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO: 1.2 to 1 at 7 5/8 percent.

INITIAL BENEFIT-COST RATIO: 1.2 to 1 at 75/8 percent (FY 1998).

BASIS OF BENEFIT-COST RATIO: Benefits and costs are from the Final General Design Memorandum dated July 1996 at October 1994 price levels, approved 30 October 1996 and updated in FY 2002.

October 1990 and updated in 1 1 2002.					
·	ACCUM.			PHYSICAL	
	PCT. OF EST.	STATUS	PERCENT	COMPLETION	
	FED. COST	(1 Jan 2004)	COMPLETE	SCHEDULE	
SUMMARIZED FINANCIAL DATA		Entire Project	30	TBD	
Estimated Federal Cost	20,400,000	•			
Estimated Non-Federal Cost	1,700,000	PHYSICAL DATA			
		Nonstructural Floo	d Control: Acquisitio	n of	
Total Estimated Project Cost	22,100,000	approximately 5,35	approximately 5,350 acres of natural floodplain		
		storage areas in th	e Passaic River Bas	sin	
Allocations to 30 September 2003	9,838,000				
Conference Allowance for FY 2004	2,000,000				
Allocation for FY 2004	1,545,000 <u>1</u> /				
Allocation through FY 2004	11,383,000 56				
Allocation Requested for FY 2005	3,000,000 71				
Programmed Balance to Complete					
After FY 2005	6,017,000				
Unprogrammed Balance to Complete					
After FY 2005	0				
1/ Poffects \$443,000 reduction assigned as savings	and clinnage and \$12,000 receipded	d in accordance with EV04 Er	peray and Water Dev	velonment Annronri	

1/ Reflects \$443,000 reduction assigned as savings and slippage and \$12,000 rescinded in accordance with FY04 Energy and Water Development Appropriations Act.

Division: North Atlantic District: New York Passaic River Preservation of Natural Storage Areas, NJ

JUSTIFICATION: The Passaic River Basin suffers average annual damages of \$116,016,000 (Oct. 1994 price levels). Properties experiencing damage include residential, commercial, industrial, public and municipal facilities. There are approximately 19,500 structures in the 100-year floodplain. The most severe recent flood occurred in April 1984, claiming 3 lives, with damages estimated at \$493,000,000. The entire basin, or portions thereof, was declared a disaster area in 1968, 1971, 1972, 1973, twice in 1975 1984, and 1992. The recurrence of the October 1903 flood of record would cause damages of \$2,492,000,000. The project does not support development of the floodplain directly or indirectly. Of the 5,350 acres to be acquired, approximately 5,200 are wetlands. The acquisition of the natural storage areas, in conjunction with maintenance of the existing floodways in acquisition areas, would maintain the environmental characteristics of the basin by preserving wetlands, open space and fish and wildlife habitats. Average annual benefits (Inundation Reduction) are \$1,850,000.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue Acquisitions	\$2,805,000
Construction Management	120,000
Planning Engineering and Design	75,000
Total	\$3,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
\$ 1,700,000	\$ 234,000
\$ 0 \$ 1,700,000	\$ 0 \$ 234,000
	During Construction and Reimbursements \$ 1,700,000

Division: North Atlantic District: New York Passaic River Preservation of Natural Storage Areas, NJ

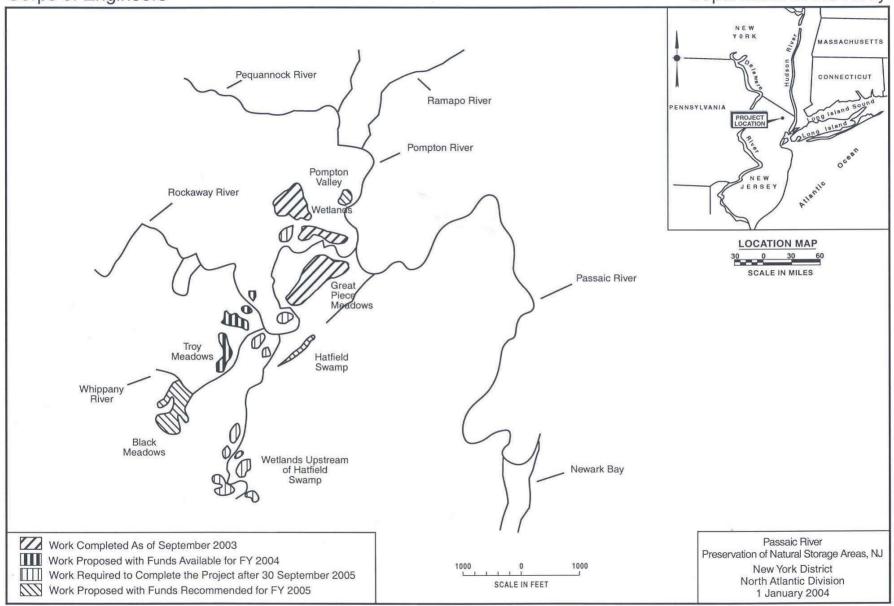
STATUS OF LOCAL COOPERATION: The State of New Jersey, through its Department of Environmental Protection (NJDEP), is the non-Federal sponsor. The PCA was executed in June 1999.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$20,400,000 is the same as the the latest estimate (\$20,400,000) presented to Congress (FY 2004).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The FEIS was filed with EPA on 17 January 1989 and the SEIS with EPA on 20 October 1995 (Note: the SEIS addresses changes to other project elements. No changes have occurred to the Preservation element).

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1988 and funds to initiate construction were appropriated in FY 1998. The Preservation of Natural Floodplain Storage has been determined to be a separable element of the overall Passaic River Flood Damage Reduction Project which can be implemented without adverse impact anywhere in the basin.

Division: North Atlantic District: New York Passaic River Preservation of Natural Storage Areas, NJ



APPROPRIATION TITLE: Construction General - Local Protection (Flood Control)

PROJECT: Ramapo River at Oakland, New Jersey (Continuing)

LOCATION: The project is located on the Ramapo River in the Borough of Oakland in Bergen County, and Wayne Township and the Borough of Pompton Lakes in Passaic County, New Jersey. The project extends from the Pompton Lake Dam upstream to West Oakland Avenue in Oakland.

DESCRIPTION: The plan of improvement has two major features. The first involves the installation of flood control taintor gates on the existing Pompton Lake Dam. The second feature involves channel modification consisting of widening and deepening 5,800 feet of the Ramapo River. Mitigation for environmental impacts is also included in the form of wetland creation. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986 and section 301(a)(9) of the Water Resources Development Act of 1996

REMAINING BENEFIT-REMAINING COST RATIO: 1.4 to 1 at 7 3/8 percent.

TOTAL BENEFIT-COST RATIO: 1.4 to 1 at 7 3/8 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 7 3/8 percent (FY 1995).

BASIS OF BENEFIT-COST RATIO: Benefits and costs are from the General Design Memorandum approved July 1994 at October 1993 price levels and updated in FY 1998.

Division: North Atlantic District: New York Ramapo River at Oakland, NJ

0.0000000000000000000000000000000000000	ACCUM. PCT. OF EST.	STATUS	PERCENT	PHYSICAL COMPLETION	001101 ====	
SUMMARIZED FINANCIAL DATA:			FED. COST	(1 Jan 2004)	COMPLETE	SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost			\$20,116,000 2.000.000	Channels & Canals Flood Diversion	100	Aug 2002
Cash Contributions	\$ ^	1,100,000	2,000,000	Structure	100	Sep 2005
Other Costs	·	900,000		Entire Project	100	Sep 2005
Total Fatimated Duniant Cont			00.440.000			
Total Estimated Project Cost			22,116,000	PHYSICAL DATA		
Allocations to 30 September 2003			10,902,000	FITISICAL DATA		
Conference Allowance for FY 2004			0	Channels & Canals: 5800 fe	et of channel	
Allocation for FY 2004			5,714,000 <u>1</u> /	modification along the Rama	apo River	
Allocation through FY 2004			16,616,000 83	Flood Diversion Structure: In		or
Allocation Requested for FY 2005			3,500,000 100	gates at the Pompton Lake	Dam.	
Programmed Balance to Complete			2			
After FY 2005 Unprogrammed Balance to Complete	<u> </u>		0			
After FY 2005	<del>,</del>		0			
			ŭ			

<sup>1/</sup> Reflects \$5,714,000 reprogrammed into project.

JUSTIFICATION: The project area suffers annual flood damages of \$1,100,000 (Oct 1995 price level) without the project. Damages of \$200,000 would occur with the project in place. The level of protection is the 40-year flood. The project would also provide protection against larger flood events. The maximum flood of record was the April 1984 flood; an approximate 40-year event, which resulted in residential damages of \$3,500,000, in 1984. This flood would cause damages estimated at \$5,200,000 if it occurred today (Oct 1995 price level). Approximately 300 families were evacuated during the 1984 flood and 20 people were trapped and had to be rescued. Flooding also caused traffic disruption causing many businesses to close. Damaging floods have occurred 11 times in the past 20 years with the most recent floods in 1983, 1984, 1987, and 1993. The project does not support the development of the floodplain directly or indirectly. The project does avoid, where possible, both long and short term environmental impacts. Mitigation includes the construction of 5.0 acres of wetlands in the project area. Average annual benefits, all flood control, are estimated at \$1,148,000 at October 1998 price levels.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Complete Flood Diversion Structure	\$ 3,000,000
Planning, Engineering and Design	100,000
Construction Management	\$ 400,000
Total	\$ 3,500,000

Division: North Atlantic District: New York Ramapo River at Oakland, NJ

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation:	Pa Du Co an	nnual nyments uring onstruction d eimbursements	Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	\$	900,000	
Pay 25 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, as determined under Section 103 (m) of the Water Resources Development Act of 1986 to reflect the non-Federal sponsors ability to pay, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities. Credits as per WRDA 1990/92 will reduce Non-Federal cash share by \$ 4,300,000 from \$5,400,000 to \$1,100,000.	\$	1,100,000	\$ 65,000
Total non-Federal Costs	\$	2.000.000	\$65,000

Total non-Federal Costs \$ 2,000,000 \$65,000

REQUIREMENTS OF LOCAL COOPERATION: Provide lands, easements, right of way, and borrow any excavated or dredged material disposal area; Pay 25 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, as determined under Section 103 WRDA (m) of the Water Resources Development Act of 1986 to reflect the non-Federal sponsors ability to pay, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.

STATUS OF LOCAL COOPERATION: The State of New Jersey, through its Department of Environmental Protection (NJDEP), is the non-Federal sponsor. By letter dated 22 October 1993, NJDEP indicated its commitment to the project. Funds to cover the entire non-Federal share of the project cost have been programmed into the New Jersey State Capital Budget for FY 1995 and FY 1996. The funds will be held in escrow and expended each year as required. NJDEP understands their responsibilities in carrying out the provisions of the PCA and is prepared to enter into such an agreement as documented in their letter of 4 January 1994. The project is also supported by the Borough of Oakland. Oakland has purchased portions of the real estate necessary for the project. The real estate will be turned over to the State of New Jersey, the non-Federal sponsor, as a share in the project cost. The PCA was executed in April 1999.

Division: North Atlantic District: New York Ramapo River at Oakland, NJ

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$20,116,000 is an increase of \$4,016,000 over the latest estimate (\$16,100,000) presented to Congress (FY 2003). This change includes the following items:

ITEM AMOUNT
Price Escalation on Construction Features \$ 100,000
Other estimating adjustments \$ 3,916,000

Total \$4,016,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS was filed with the EPA ON 21 June 1985.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1988 and funds to initiate construction were appropriated in FY 1995.

Division: North Atlantic District: New York Ramapo River at Oakland, NJ

APPROPRIATION TITLE: Construction, General - Flood Control

PROJECT: Raritan River Basin, Green Brook Sub-Basin, New Jersey (Continuing)

LOCATION: The Green Brook Sub-Basin project area is located within the Raritan River Basin in north-central New Jersey in Middlesex, Somerset and Union Counties. It drains approximately 65 square miles of primarily urban and industrialized area. It includes the following communities: Dunellen, Middlesex Borough, Piscataway, South Plainfield, Bound Brook, Bridgewater, Green Brook, North Plainfield, Warren, Watchung, Berkeley Heights, Plainfield, and Scotch Plains. The project area is divided into three sub-areas: the lower, upper and Stony Brook portions of the sub-basin.

DESCRIPTION: The NED plan consists of a system of levees and floodwalls in the lower portion of the basin, channel modifications and dry detention basins in the upper portion of the basin, and channel modifications in the Stony Brook portion of the sub-basin. The recommended plan consists of levees and floodwalls in the lower portion of the basin and channel modifications in the Stony Brook portion of the sub-basin. The upper portion of the sub-basin has been deferred.

AUTHORIZATION: Water Development Act of 1986.

REMAINING BENEFITS-REMAINING COST RATIO: 1.3 to 1 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 7 5/8 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 7 5/8 percent (FY 1998).

BASIS OF BENEFIT-COST RATIO: Benefits are from the analysis contained in the Final General Reevaluation Report dated May 1997 at April 1996 price levels.

Division: North Atlantic District: New York Raritan River Basin, Green Brook Sub-Basin, NJ

SUMMARIZED FINANCIAL DATA: Estimated Federal Cost Programmed Construction 263,200,000 Unprogrammed Construction 46,200,000	ACCUM. PCT. OF EST. FED. COST 309,400,000	STATUS PERCENT COMPLETION (1 Jan 2004) COMPLETE SCHEDULE Element 1 25 TBD Element 2,5 0 Indefinite Elements 3,4,6,7 0 TBD Entire Project 0 Indefinite		
Estimated Non-Federal Cost	104,000,000	•		
Programmed Construction 87,700,000				
Cash Contributions 25,500,000		PHYSICAL DATA		
Other Costs 62,200,000		Element 1 is located in Bound Brook Borough		
Unprogrammed Construction 16,300,000		and western Middlesex Borough. It consists		
Cash Contributions 3,100,000		of levees, floodwalls, closure structures,		
Other Costs 13,200,000		interior drainage facilities, a bridge re-		
		construction and non-structural measures		
Total Estimated Programmed Construction Cost	350,900,000	including flood proofing and buyouts.		
Total Estimated Unprogrammed Construction Cost	62,500,000	Element 2,5(Unprogrammed) consists of channel		
Total Estimated Project Cost	413,400,000	modifications and two dry detention basins.		
		Elements 3,4,6,7 will consist of levees,		
Allocations to 30 September 2003	48,279,000	floodwalls, closure structures, bridge recon-		
Conference Allowance for FY 2004	7,000,000	struction and non-structural measures		
Allocation for FY 2004	4,910,000 <u>1</u> /	including floodproofing and buyouts.		
Allocations through FY 2004	53,189,000 17			
Allocation Requested for 2005	9,100,000 21			
Programmed Balance to complete after FY 2005	200,911,000			
Unprogrammed Balance to complete after FY 2005	46,200,000			

1/ Reflects \$1,549,000 reduction assigned as savings and slippage and \$41,000 rescinded in accordance with FY04 Energy and Water Development Appropriations Act and \$500,000 as funds reprogrammed out.

JUSTIFICATION: The project area suffers annual flood damages of \$41,000,000 (Apr 96 P.L.) without the project. On August 28, 1971 Hurricane Doria caused \$85,200,000 in damages (Oct 95 P.L.). Another major storm occurred on August 2, 1973 which caused \$89,300,000 in damages (Oct 95 P.L.). Flooding was so extensive that the area was designated a Major Disaster Area. Six deaths were attributed to this storm, thirty four people were injured and there were more than 1,000 people evacuated from their residences. Average annual benefits, all flood control, are \$37,773,000 (April 1996 price level)

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue Construction of Segment U Levee/ Floodwall/ (Element 1) \$ 5,988,000
Continue Construction of Segment R Levee/ Floodwall/ (Element 1) \$ 2,112,000
Construction Management \$ 1,000,000
Total \$ 9,100,000

Division: North Atlantic District: New York Raritan River Basin, Green Brook Sub-Basin, NJ

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, relocations and borrow excavated or dredged material disposal areas.	\$ 62,200,000	
Pay 25 percent of cost associated with non-structural flood protection	16,300,000	
Pay 6 percent of the costs allocated to flood control, to bring the total non-Federal share of flood control costs to 25 percent, as determined under Section 103 (m) of the Water Resources Development Act of 1986,and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	25,500,000	\$1,157,000
Total Non-Federal Costs	\$104,000,000	\$1,157,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The State of New Jersey Department of Environmental Protection, provided a letter dated 17 April 1997 stating their support and endorsement of the project. Governor Whitman also provided a letter of support on 26 February 1998. The Green Brook Flood Control Commission has stated their strong support for the project in a letter dated 4 October 1995. Also, several counties and municipalities have adopted resolutions endorsing and supporting the project. The Project Cooperation Agreement was executed in June 1999.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$309,400,000 is the same as the latest estimate (\$309,400,000) presented to Congress (FY 2004):

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed in August 1980. A Supplemental Environmental Impact Statement with the Final General Reevaluation Report was released in May 1997 and the Record of Decision was issued in July 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986 and funds to initiate construction were appropriated in FY 1998.

Division: North Atlantic District: New York Raritan River Basin, Green Brook Sub-Basin, NJ

Department of the Army Corps of Engineers BRIDGEWATER TWP. UNION CO. TWP. OF BERKELEY HEIGHTS SOMERSET CO. BRIDGEWATER TWP. TWP. OF GREEN BROOK SOMERSET CO. MIDDLE BROOK BORO OF WATCHING TWP. OF GREEN BROOK SOMERSET CO. UNION CO. MUNICIPAL SCOTCH PLAINS TWP. GREEN SOMERSET CO. BORO OF N.PLAINFIELD SOMERSET CO. BORO OF N. PLAINFIELD BOUND BROOK BORO BROOK BORO OF FANWOOD GREEN BORO OF MIDDLESEX BONYGUT BROOK MIDDLESEX CO. BORO OF MIDDLESEX MASS NEW YORK PISCATAWAY TWP UNION CO. CITY OF PLAINFIELD CONN. MIDDLESEX CO. BORO OF S. PLAINFIELD MIDDLESEX CO. PISCATAWAY TWP. VICINITY MAP **LEGEND** LEVEES WITH LIMITED FLOODWALL SECTIONS Work Completed As of 30 September 2003 Green Brook Sub-Basin CHANNEL MODIFICATIONS Raritan River, NJ Work Proposed with Funds Available for FY 2004 DRY DETENTION BASIN (deferred) **New York District** Work Proposed with Funds Recommended for FY 2005 Bridge North Atlantic Division Work Required to Complete the Project after 30 September 2005 1 January 2004 -FP-FP- Flood Proofing

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Lackawanna River, Olyphant, Pennsylvania (Continuing)

LOCATION: Olyphant, Pennsylvania, is located along the Lackawanna River in the northeastern portion of the Commonwealth of Pennsylvania, in Lackawanna County.

DESCRIPTION: The proposed flood control system will provide a 100-year level of protection for the Borough. The project consists of levees, floodwalls, a closure structure, and interior drainage facilities. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1992. The project was amended by the FY 04 Energy and Water Development Appropriations Act.

REMAINING BENEFIT - REMAINING COST RATIO: 5.5 to 1 at 8 1/4 percent.

TOTAL BENEFIT - COST RATIO: 1.3 to 1 at 8 1/4 percent.

INITIAL BENEFIT - COST RATIO: 1.3 to 1 at 8 1/4 percent (FY 1995).

BASIS OF BENEFIT - COST RATIO: Benefits are from the final Design Memorandum approved in January 1997 at October 1995 price levels.

SUMMARIZED FINANCIA	AL DATA		ACCUM PCT. OF EST. FED COST	STATUS (1 Jan 2004)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal C Cash Contributions Other Costs	ost: 1,000,000 4,615,000	15,885,000 5,615,000		Entire Project	80	TBD
Total Estimated Project C	ost	21,500,000				

Division: North Atlantic District: Baltimore Lackawanna River, Olyphant, PA

#### SUMMARIZED FINANCIAL DATA:(CONT'D)

Allocations to 30 September 2003	11,785,000			
Conference Allowance for FY 2004	0			
Allocation for FY 2004	800,000	<u>1/</u>		
Allocations through FY 2004	12,585,000		79	
Allocation Requested for FY 2005	2,600,000		96	
Programmed Balance to Complete				
after FY 2005	700,000			
Unprogrammed balance to Complete				
after FY 2005	0			

#### PHYSICAL DATA

Earth levees – 3,800 feet Concrete floodwall – 1,400 feet Drainage Control Structures - 7 Gabion slope protection – 1,500 feet Stormwater Diversion Channel – 3,000 feet

### 1/ Reflects \$800,000 reprogrammed to the project

JUSTIFICATION: Major floods occurred in the Lackawanna River Basin in 1942, 1955, 1985, and most recently in January 1996. While the damage from these floods was widespread in the Lackawanna Basin, including many small communities and rural developments, the largest and most concentrated damages occurred in urbanized areas, including the City of Scranton and the Borough of Olyphant. The January 1996 flood is estimated to have caused \$15-20 million in damages at Olyphant (October 1997 price level). The Olyphant community comprises a part of the Scranton Metropolitan Area and is important in the commerce and culture of the region. The 1996 flood caused serious property damage to homes and businesses, and untold trauma and hardship to local residents. Flood protection is desired to maintain homes and businesses free from flood damage and promote community improvement. The recommended plan is the national Economic Development Plan that maximizes net economic benefits. It will prevent about 84 percent of the existing \$1.44 million in average annual commercial, industrial and residential flood damages estimated to occur in the protected area. Estimated average annual benefits, all flood control, are \$2,193,000, based on the final Design Memorandum approved in January 1997 at October 1995 price levels.

FISCAL YEAR 2005 The requested amount will be applied as follows:

Complete Stormwater Drainage	\$1,570,000
Planning, Engineering, and Design	850,000
Construction Management	180,000

Total \$2,600,000

Division: North Atlantic District: Baltimore Lackawanna River, Olyphant, PA

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal Annual

sponsor must comply with the requirements listed below:

Payments Operation During Maintenance Construction and Replacement and Costs Reimbursements

\$3,512,000

Provide lands, easements, and rights of way

Requirements of Local Cooperation

Modify or relocate utilities, roads, bridges (except railroad bridges) and other facilities where necessary in the construction of the project

\$1,103,000

Pay 5 percent of the cost allocated to flood control and bear all costs of operation, maintenance, and replacement of flood control facilities.

\$1,000,000

60,000

Total Non-Federal Costs

\$5,615,000

60.000

STATUS OF LOCAL COOPERATION: The local sponsor for the Olyphant local flood control project is the Borough of Olyphant. The Commonwealth of Pennsylvania has entered into a subagreement with the Borough that it will contribute 50% of the non-Federal share. The final Project Cooperation Agreement was executed in August 1998. To date, the sponsor has fully complied with the local requirements on the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$15,885,000 is an increase of \$3,885,000 from the latest estimate (\$12,000,000) submitted to Congress (FY 2003). This change includes the following item:

ITEM	AMOUNT
Price Escalation on Construction Features	\$ 560,000
Authorized Modifications	1,500,000
Design Changes	1,825,000
TOTAL	\$3,885,000

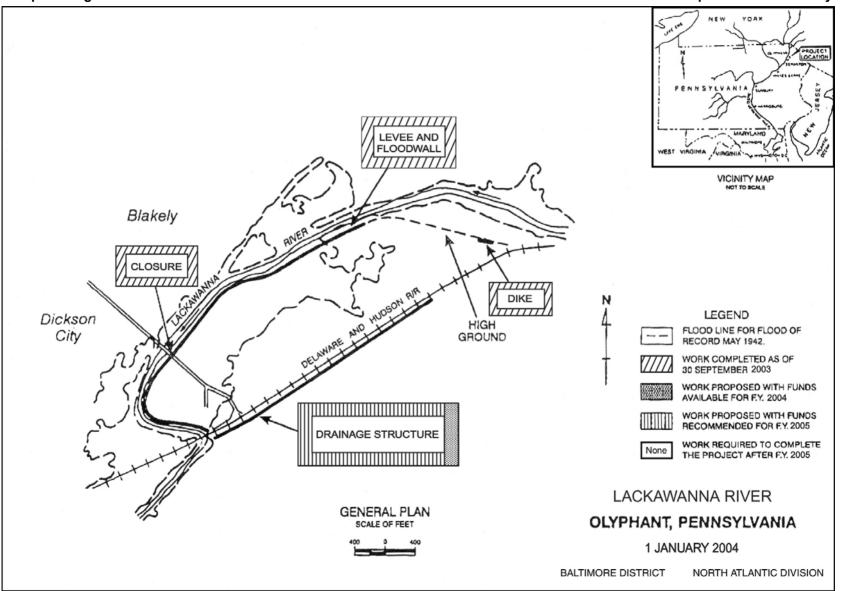
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS was filed with EPA in April 1992. An Environmental Assessment (EA) including Finding of No Significant Impact was included in the final Design Memorandum for the first construction element (dike), approved in July 1994. An EA for the second construction element (levee/floodwall) was included in the final Design Memorandum for the second construction element, released in January 1997. This second EA with a Finding of No Significant Impact was approved in April 1997.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1992, and funds to initiate construction were appropriated in FY 1995.

Division: North Atlantic District: Baltimore Lackawanna River, Olyphant, PA

> 2 February 2004 108

### **Department of the Army**



APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Wyoming Valley, Pennsylvania (Levee Raising) (Continuing)

LOCATION: Wyoming Valley is located in northeastern Pennsylvania and extends from Duryea on the Lackawanna River southwestward to Nanticoke on the Susquehanna River. The Wyoming Valley flood control projects are located on the Susquehanna River in Luzerne County and are the four contiguous existing Federal flood control projects at Plymouth, Kingston-Edwardsville, Swoyersville-Forty Fort, and Wilkes-Barre and Hanover Township, which together function as a flood control system within the Valley.

DESCRIPTION: The four existing Federal flood control projects in the Wyoming Valley were designed to protect against a flood equal to the March 1936 event which had a peak flow of 232,000 cubic feet per second. Modifications to the existing project would protect against flood flows of 318,500 cubic feet per second that would be caused by a recurrence of Storm Agnes. The proposed modifications include raising existing levees and floodwalls between 3 and 5 feet, modifying closure structures, relocating utilities, and providing some new floodwalls and levees to maintain the integrity of the flood control system. The proposed project also includes a plan to reduce project-related adverse impacts. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986 and the Water Resources Development of 1996.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable because project construction is substantially complete.

TOTAL BENEFIT - COST RATIO: Not applicable because project construction is substantially complete.

INITIAL BENEFIT - COST RATIO: 2.8 to 1 at 8 1/4 percent (FY 1995).

BASIS OF BENEFIT - COST RATIO: Benefits are from the final Phase II General Design Memorandum approved February 1996 at January 1993 price levels.

SUMMARIZED FINANCIAL DATA			STATUS Jan 2004)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$131,000,000	,	,		
Estimated Non-Federal Cost:	44,000,000	Leve	ee Raising	100	Jan 2003
Cash Contributions \$33,538,000		Enti	tire Project	75	TBD
Other Costs 10,462,000			•		
Total Estimated Project Cost	\$175,000,000				

Division: North Atlantic District: Baltimore Wyoming Valley, PA (Levee Raising)

SUMMARIZED FINANCIAL DATA:(CONT'D)

Allocations to 30 September 2003 97,654,000 Conference Allowance for FY 2004 10,021,000 Allocation for FY 2004 5,855,000 1/ Allocations through FY 2004 103,509,000 Allocation Requested for FY 2005 7,300,000 Programmed Balance to after FY 2005 20,191,000 **Unprogrammed Balance to Complete** after FY 2005 0

1/ Reflects \$2,218,000 reduction assigned as savings and slippage, \$59,000 rescinded in accordance with FY 04 Energy and Water Development Appropriations Act, and \$1,889,000 reprogrammed from the project.

79

85

#### PHYSICAL DATA

		PHI SICAL DATA	
Swoyersville-	Forty Fort	Plymou	th
Completed Work	Raising Work	Completed Work	Raising Work
Levees - Earthfill: 16,970 ft. Floodwall - Steel sheetpile: 2,490 ft. Channel - 3,900 ft.	Levees - Earthfill: 16,500 ft. x 3-5 ft. Floodwall - Steel sheetpile: 4,000 ft. x 3-5 ft.	<u>Levees</u> - Earthfill: 8,700 ft. <u>Channel</u> - 2,670 ft. <u>Pump Stations</u> – 2	Levees - 8,600 ft. x 2-4 ft.  Floodwall - Concrete: 200 ft. x 2-4 ft.  Steel sheetpile: 200 ft. x 2-4 ft.  Earth: 500 ft. x 2-4 ft.  Pump Station Modification- 2
Kingston-Edw	vardsville	Wilkes-Barre and Hanov	ver Township
Completed Work	Raising Work	Completed Work	Raising Work
Levees - Earthfill: 18,430 ft . Conduit - 16.5 ft. x 6,660 ft. Channel - 3,640 ft. Pump Stations - 3	Levees - Earthfill: 17,300 ft. x 3-5 ft. Floodwall - Concrete: 500 f. x 3-5 ft. Earth: 500 ft. x 3-5 ft. Closures - 3 new Pump Station Modifications - 3	<u>Levees</u> - Earthfill: 27,860 ft. <u>Floodwall</u> - Concrete: 160 ft. <u>Pump Stations</u> - 5 stormwater 8 sanitary <u>Channel</u> - 1,000 ft.	Levees - Earthfill: 20,600 ft. x 3-5 ft. Floodwall - Concrete: 500 ft. x 3-5 ft. Sheetpile 4,300 ft. x 3-5 ft. Earth: 600 ft. x 3-5 ft. Closures - 3 new & 1 modified Pump Station Modification - 13

Division: North Atlantic District: Baltimore Wyoming Valley, PA (Levee Raising)

2 February 2004

JUSTIFICATION: The four existing local protection projects which comprise the Wyoming Valley system were constructed between 1935 and 1976 and provide protection for an area of 5,160 acres and a population of 225,000. Over the past 200 years at least 32 floods have been recorded which exceeded a stage of 25 feet at Wilkes-Barre compared to the flood stage of 22 feet. The discharge of 345,000 cubic feet per second during June 1972 (Storm Agnes) without the now completed Cowanesque and Tioga-Hammond Lakes projects in operation overtopped the protection and resulted in the greatest flood of record with damages of \$730,000,000. A recurrence of Storm Agnes would result in damages to about 25,000 structures with an estimated value of about \$4 billion (October 1997 price level). In January 1996, a combination of rainfall and snowmelt resulted in a flood stage of about 34 feet at Wilkes-Barre, PA. Although the existing system prevented flood damages of nearly \$500 million, residual damages were estimated at about \$6 million in the Wyoming Valley area. The average annual benefits amount to \$27,143,000 essentially all for flood control, based on the final Phase II General Design Memorandum approved February 1996 at January 1993 price levels.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Complete Construction of Wilkes-Barre, Hanover

Township levee and Relief Culverts \$6,000,000
Planning, Engineering and Design 520,000
Construction Management 780,000
Total \$7,300,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Annual

AIIIIA

Payments Operation,
During Maintenance,
Construction and

and Replacement

Requirements of Local Cooperation Reimbursements Costs

Provide lands, easements, and rights of way. 4,272,000

Modify or relocate, utilities, roads, bridges (except ailroad bridges) and other facilities where necessary in the

construction of the project.

Pay 18 percent of the costs allocated to flood control to bring 31,735,000 175,000

the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance and replacement of

flood control facilities.

Pay one-half of the separable costs allocated to recreation (except 1,803,000 39,000

recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.

Total Non-Federal Costs \$44,000,000 \$214,000

Division: North Atlantic District: Baltimore Wyoming Valley, PA (Levee Raising)

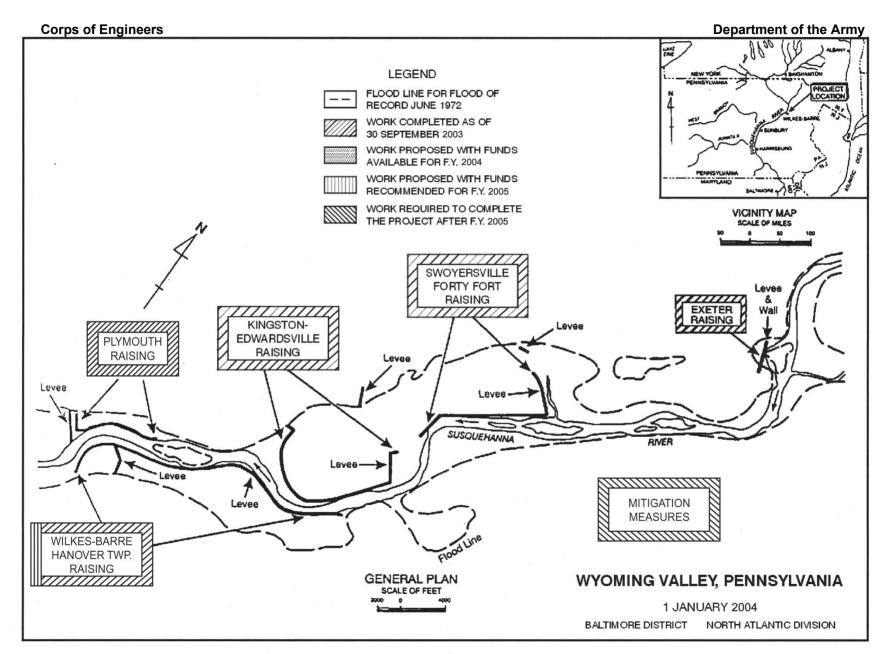
STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the Luzerne County Flood Protection Authority. The Pennsylvania Department of Environmental Protection has committed to provide 45 percent of the non-Federal share of project costs. Letters of intent to provide the required local cooperation requirements were furnished by Luzerne County (19 January 1995) and the Commonwealth of Pennsylvania (30 December 1994). A Project Cooperation Agreement was executed in October 1996. To date, the Authority has fully complied with the local requirements on the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$131,000,000 is the same as the latest estimate (\$131,000,000) presented to Congress (FY 2004).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Supplemental Environmental Impact Statement is included in the final General Design Memorandum approved February 1996. The Record of Decision was signed 24 June 1996.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1984, and funds to initiate construction were appropriated in FY 1995.

Division: North Atlantic District: Baltimore 2 February 2004



APPROPRIATION TITLE: Construction, General – Dam Safety

PROJECT: Jennings Randolph Lake, MD & WV (Continuing)

LOCATION: Jennings Randolph Lake is located on the North Branch Potomac River on the state line between Garrett County, Maryland, and Mineral County, West Virginia. The dam site is located approximately 8 river miles upstream from the confluence with the Savage River at Bloomington, Maryland, and approximately 1.3 miles upstream from Barnum, West Virginia.

DESCRIPTION: The existing project, which was formerly known as Bloomington Lake, was completed in 1981. The dam is rolled earth and rockfill structure with an impervious core rising 296 feet from the streambed and extending 2,130 feet across the valley. The dam includes a dike 900 feet long on the left (north) bank, and a spillway with tainter gates along the ridge between the dike and the dam. Outlet works are provided in the right (south) abutment. The project provides low flow augmentation, water quality control, flood control, water supply, and recreation. With a full conservation pool, the lake, controlling a drainage area of 263 square miles, is about 5.5 miles long and has a surface area of 952 acres. Of the 130,900 acre-feet of storage available, 36,200 acre-feet is allotted to flood control; 51,005 acre-feet is water quality storage that is primarily used for augmenting low river flows for acid mine drainage abatement; 40,995 acre-feet is contracted water supply storage for the metropolitan Washington, D.C. area; and 2,700 acre-feet is dead storage. In order to meet current dam safety criteria, a project modification will be undertaken to allow the project to adequately pass the probable maximum flood (a rare but potential event that is used as design criteria to ensure that a dam will not be overtopped). Based on analyses performed in 2002-03, a fuse plug spillway, in the left abutment between the gated spillway and saddle dike, in possible combination with a minor (less than 3 feet) dam raising was identified as the recommended alternative.

AUTHORIZATION: Section 1203 of the Water Resources Development Act of 1986

REMAINING BENEFIT - REMAINING COST RATIO: 16.3 to 1 at 6 1/8 percent

TOTAL BENEFIT - COST RATIO: 16.3 to 1 at 6 1/8 percent

INITIAL BENEFIT-COST RATIO: 16.3 to 1 at 6 1/8 percent (FY 2004)

BASIS OF BENEFIT-COST RATIO: Benefits are based on the economic analysis contained in the Dam Safety Assurance Program Evaluation Report, Jennings Randolph Lake, Maryland and West Virginia, dated May 2003, at October 2002 price levels.

SUMMARIZED FINANCIAL I	DATA	ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 2004)	PHYSICAL PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost: Cash Contributions \$1,100,000 Other Costs 0	\$22,500,000 1,100,000		Entire Project	0	TBD
Total Estimated Project Cost	\$23,600,000				

Division: North Atlantic District: Baltimore Jennings Randolph Lake, MD & WV 2 February 2004

#### SUMMARIZED FINANCIAL DATA: (continued)

Allocations to 30 September 2003 0 Conference Allowance for FY 2004 0 Allocation for FY 2004 800.000 1/ Allocations through FY 2004 800,000 4 Allocation Requested for FY 2005 640,000 6 Programmed Balance to Complete after FY 2005 21,060,000 Unprogrammed Balance to Complete after FY 2005 0

PHYSICAL DATA
- Fuse plug spillway in left abutment

1/ Funds provided from the Dam Safety Assurance and Seepage/Stability Correction Program line item.

JUSTIFICATION: The Corps of Engineers completed construction of Jennings Randolph Dam in 1981, under the authority of the Flood Control Act of 1962. In the 1990's, the Corps initiated a water reallocation study for Jennings Randolph Lake. During this study it was discovered that the reservoir's spillway capacity is insufficient to handle the revised probable maximum flood (PMF) based on current Corps of Engineers dam safety criteria. While the project as originally designed met all dam safety criteria applicable at the time, recent changes to rainfall criteria have resulted in a revised, larger PMF. As a result, the Corps halted its reallocation study effort and initiated a separate spillway evaluation study for Jennings Randolph Lake under the Dam Safety Assurance Program established by Section 1203 of WRDA 1986. Subsequently, analyses were undertaken to establish the existing spillway capacity and to identify potential alternatives to bring the project back into compliance with current dam safety criteria. Based on these analyses, it was determined that the addition of a fuse plug spillway in possible combination with a minor (less than 3 feet) dam raising could accomplish this objective.

Since the project was constructed in 1981, the dam has prevented flood damages in excess of \$456 million (Oct 02 price levels). This equates to \$22 million in annual flood control benefits over the 21 years of operation. In the authorization study, Jennings Randolph Lake, was projected to produce annual flood control benefits of \$3.6 million, so the project has far exceeded expectations. In addition, the project is estimated to contribute over \$19 million annually in water quality, water supply, and recreation benefits (Oct 02 price levels).

FISCAL YEAR 2005: The requested amount will be applied as follows:

Planning, Engineering & Design 640,000

Division: North Atlantic District: Baltimore Jennings Randolph Lake, MD & WV 2 February 2004

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Acts of 1986 and 1996, the Non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance and Replacement Costs	
Requirements of Local Cooperation			
Provide lands, easements, rights of ways	\$ 0		
Pay 15 percent of the modification costs in accordance With the cost allocation in effect at the time of construction	\$1,100,000	0	
Total Non-Federal Costs	\$1,100,000	0	

STATUS OF LOCAL COOPERATION: In 1970 and 1982, the Washington area water supply utilities executed water supply agreements to purchase 33.2 percent of the Jennings Randolph Lake storage. Based on the Section 1203 cost-sharing requirements, the water supply users will be required to pay a portion of 15 percent of the design and construction costs for the dam safety project modification, with the Federal government funding the remainder. This portion is determined by the current storage allocation. Subsequently, the total non-Federal share is 4.98 percent of the project modification costs (33.2 percent of 15 percent). The non-Federal share will be recouped during or after construction in one of three ways: (1) incrementally during construction, (2) in lump sum upon completion of construction, or (3) following construction completion, in annual payments with interest. The water supply utilities have been informed of the project modification results, and will select the payment method during the final design phase. No amendment to the water supply agreement will be required. All additional operation and maintenance costs will be subsumed under the current water supply agreement.

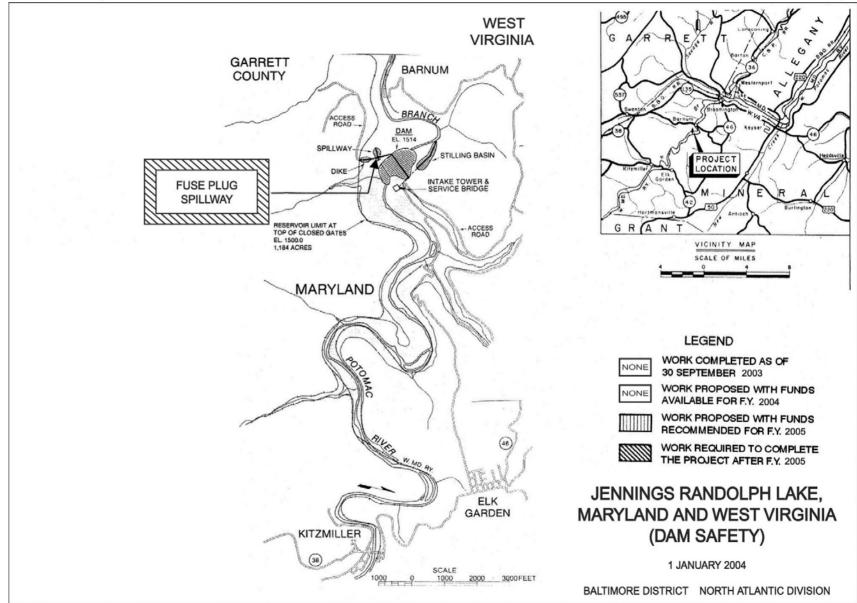
COMPARISON OF FEDERAL COST ESTIMATES: This is the initial estimate presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A record of environmental consideration was approved in June 2002 and determined that the project will not have significant impacts.

OTHER INFORMATION: Preconstruction Engineering and Design efforts are being initiated in FY 2004 using Dam Safety Seepage and Stability Correction Program funds. Fiscal Year 2005 funds will be used to continue planning, engineering and design.

Division: North Atlantic District: Baltimore 2 February 2004

Corps of Engineers Department of the Army



APPROPRIATION TITLE: Construction, General – Dam Safety Assurance – Flood Control

PROJECT: Otter Brook Dam, New Hampshire (Continuing)

LOCATION: Otter Brook Dam is located within the Ashuelot River Watershed in the town of Keene in southern New Hampshire. The dam site is located along Otter Brook about 2.4 miles above its confluence with the Branch River and about 4.9 miles above the confluence of the Branch and Ashuelot Rivers.

DESCRIPTION: Otter Brook Dam was constructed in 1958 as a single-purpose flood control project. The main dam is composed of an earth filled embankment with rock slope protection, 1,288 feet in length, with a maximum height of 133 feet above the riverbed. Storage capacity of the reservoir is 17,600 acre-feet at spillway crest. The dam includes an uncontrolled concrete overflow spillway, 145 feet in length, through a rock cut in the west abutment. The project has prevented \$28.7 million in damages to date. Proposed dam safety modifications involve the construction of a new concrete weir using mechanical fuseplugs designed to fail prior to exceeding discharge capacity. The failure of the fuseplugs would lower the spillway crest elevation, increasing spillway capacity sufficiently to discharge the probable maximum flood.

AUTHORIZATION: Flood Control Act of 1944.

REMAINING BENEFIT-REMAINING COST RATIO: 3.0 to 1 at 6 1/8 percent.

TOTAL BENEFIT-COST RATIO: 2.7 to 1 at 6 1/8 percent.

INITIAL BENEFIT-COST RATIO: 2.7 to 1 at 6 1/8 percent (FY 2004)

BASIS OF BENEFIT-COST RATIO: Benefits are based on the economic analysis contained in the Dam Safety Assurance Program Evaluation Report, Otter Brook Dam, New Hampshire, dated May 2003, at July 2000 price levels.

SUMMARIZED FINANCIAL DATA		ACCUMULATED PCT. OF EST. FED COST	STATUS (1 Jan 2004)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$4,550,000		Entire Project	0	TBD
Estimated Non-Federal Cost	0				
Total Estimated Project Cost	\$4,550,000				

Division: North Atlantic District: New England Otter Brook Dam, NH

SUMMARIZED FINANCIAL DATA (	Continued)	ACCUMULATED PCT. OF EST. FED COST	PHYSICAL DATA
Allocations to 30 September 2003 Conference Allowance for FY 2004 Allocation for FY 2004 Allocations through FY 2004	\$ 0 0 420,000 <u>1</u> / 420,000	9	Construct new concrete spillway, 145 feet in length, with mechanical fuseplugs designed to fail prior to to exceeding discharge capacity.
Allocation Requested for FY 2005 Programmed Balance to Complete After FY 2005 Unprogrammed Balance to Complete After FY 2005	\$ 3,000,000 1,130,000 0	75	

<sup>1/</sup> Funds to be provided from the Dam Safety Seepage and Stability Correction Program.

JUSTIFICATION: Otter Brook Dam has performed satisfactorily since placed in operation in 1958. The project is in good overall condition, with the only significant dam safety problem being the spillway cannot pass the design flood as computed under current hydrologic criteria. During a hydrologic event in the magnitude of the revised spillway design flood, inflow at Otter Brook Lake would exceed spillway capacity, overtopping the dam by one foot and jeopardizing the embankment structure. Catastrophic failure of the dam would cause an estimated \$85 million in property damage and place nearly 2,600 people at risk in the densely populated City of Keene and other downstream communities. Construction of a new spillway at Otter Brook Dam will greatly enhance the protection of life and property in the Ashuelot and Connecticut River Basins, require minimal additional operations and maintenance efforts and have no net impact on the local environment. Average annual benefits for dam safety modifications are \$703,700 at July 2000 prices, of which \$555,600 is for flood control and \$148,100 for recreation.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Initiate Construction	\$2,580,000
Engineering and Design	220,000
Construction Management	200,000
Total	\$3,000,000

NON-FEDERAL COSTS: None Required.

STATUS OF LOCAL COOPERATION: None Required.

Division: North Atlantic District: New England Otter Brook Dam, NH

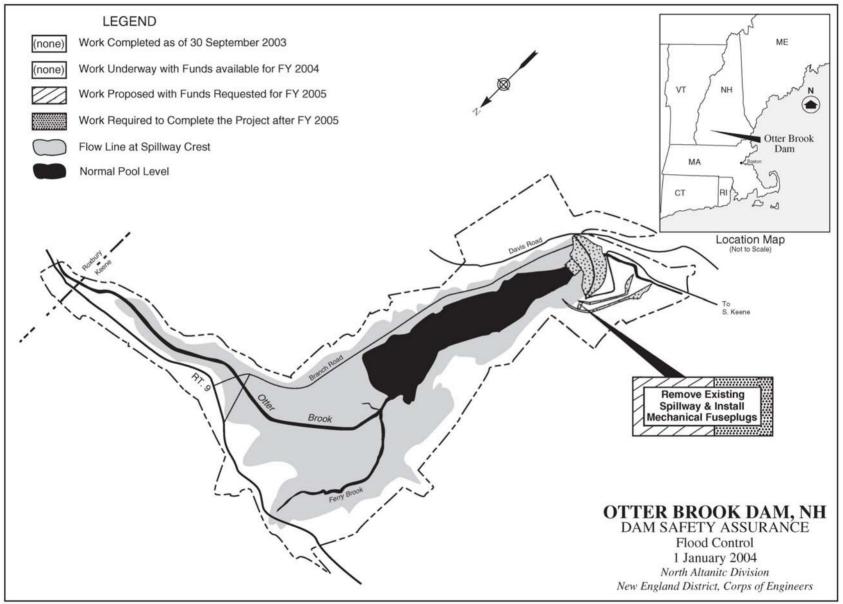
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$4,550,000 is the initial estimate presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment and Finding of No Significant Impact were completed in April 2003. Work on the dam is restricted to the period between 1 July and 31 December to protect wetland species.

OTHER INFORMATION: Preconstruction Engineering and Design efforts are being initiated in FY 2004 using Dam Safety Seepage and Stability Correction Program funds. Fiscal Year 2005 Construction, General funds will be used to initiate construction.

Division: North Atlantic District: New England Otter Brook Dam, NH

Corps of Engineers Department of the Army



APPROPRIATION TITLE: Construction, General - Environmental Restoration

PROJECT: Chesapeake Bay Oyster Recovery, Maryland & Virginia (Continuing)

LOCATION: The Chesapeake Bay in Maryland & Virginia

DESCRIPTION: The project will contribute to multi-agency and private efforts to restore oyster populations in the Chesapeake Bay. Project elements include: construction or rehabilitation of oyster reefs to create sanctuary and harvestable oyster habitats; construction of hatchery and seed bar facilities for production and collection of disease-free oyster seed or "spat"; planting spat and brood-stock oysters in locations which best foster oyster reproduction and health; and monitoring the performance of the project to increase oyster populations.

AUTHORIZATION: Water Resources Development Act of 1986, as amended by Section 505 of WRDA '96 and Section 342 of WRDA '00 and Section 113 of the Energy and Water Appropriation Act of 2002.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

INITIAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

	ACCUM		PHYSICAL
	PCT. OF EST.	PERCENT	COMPLETION
SUMMARIZED FINANCIAL DATA	FED COST S	TATUS COMPLETE	SCHEDULE
	(1 Ja	an 2004)	

Estimated Federal Cost 20,000,000

Estimated Non-Federal Cost: 6,667,000 Entire Project 45 TBD

Cash Contributions \$ 0 Other Costs \$6,667,000

Total Estimated Project Cost \$26,667,000

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1/ Reflects \$841,000 reduction assigned as savings and slippage and \$22,000 rescinded in accordance with the FY 04 Energy and Water Development Appropriations Act.

JUSTIFICATION: The Chesapeake Bay oyster population has declined dramatically since the turn of the century, largely due to the parasitic diseases, MSX, Dermo, and overharvesting. These diseases kill oysters before they reach maturity and marketable size. As a result, there has been a collapse in the oyster industry, with the 1995 harvest equating to less than one percent of the harvest 100 years ago. More significantly, the reduced oyster population has adversely impacted water quality in the Bay, due to the smaller size and numbers of oyster beds to filter and clean the water. Activities to restore physical oyster habitat and maintain water quality are critical to the economic and environmental survival of the Chesapeake Bay. Restoration of oyster populations in the bay is a high priority of the State of Maryland, the Commonwealth of Virginia, and the Chesapeake Bay Program. Currently, there is a Chesapeake Bay goal to increase oyster habitat 10-fold by 2010. The project will help implement recommendations in the June 1999 scientific consensus document on Chesapeake Bay oyster restoration. As part of this project, the Corps will develop a long-term master plan to document the Corps' role in these recommendations.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Fish and Wildlife Facilities:

Maryland 100,000 Virginia 300,000

Planning, Engineering, and Design:

Maryland 300,000 Virginia 300,000

Total \$1,000,000

Division: North Atlantic District: Baltimore Chesapeake Bay Oyster Recovery, MD and VA

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Payments
During
Construction
and

Annual Operation Maintenance

and

\$0

anu Daimakumaan Replacement Costs

Reimbursements

\$6.667.000

Pay 25 percent of the cost allocated to fish and wildlife restoration (by work-in-kind credits) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of fish and wildlife facilities.

Requirements of Local Cooperation

Division: North Atlantic

Total Non-Federal Costs \$6,667,000

STATUS OF LOCAL COOPERATION: The State of Maryland and the Commonwealth of Virginia are the non-Federal project sponsors. The Project Cooperation Agreement between the Corps of Engineers and the State of Maryland was executed in February 1997. An amendment to this Project Cooperation Agreement was executed in July 2002. The Project Cooperation Agreement between the Corps and the Commonwealth of Virginia was executed in September 2001. To date, the States have fully complied with the requirements of local cooperation.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal estimate of \$20,000,000 is the same as the latest estimate (\$20,000,000) presented to Congress (FY 2004).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment and finding of no significant impact was completed in January 1996 for the Maryland activities. Supplemental environmental information for the Maryland activities was completed in July 1999 and June 2002. A separate environmental assessment and finding of no significant impacts was prepared in spring of 2001 for the Virginia activities.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1995.

District: Baltimore Chesapeake Bay Oyster Recovery, MD and VA

**Corps of Engineers Department of the Army** VICINITY MAP WASHINGTON D.C. DE **OYSTER BEDS** MD OCEAN **LEGEND BAR CREATION &** REHABILITATION AREAS WORK COMPLETED AS OF 30 SEPTEMBER 2003 WORK PROPOSED WITH FUNDS AVAILABLE FOR F.Y. 2004 RICHMOND WORK PROPOSED WITH FUNDS RECOMMENDED FOR F.Y. 2005 WORK REQUIRED TO COMPLETE THE PROJECT AFTER F.Y. 2005 CHESAPEAKE BAY GENERAL PLAN OYSTER RECOVERY, MARYLAND AND VIRGINIA 1 JANUARY 2004 BALTIMORE DISTRICT NORTH ATLANTIC DIVISION

APPROPRIATION TITLE: Construction, General - Environmental Restoration

PROJECT: Poplar Island, Maryland (Continuing)

LOCATION: Poplar Island is a group of islands located in the upper middle Chesapeake Bay approximately 34 nautical miles southeast of the Port of Baltimore.

DESCRIPTION: The project consists of reconstructing Poplar Island to its approximate size in 1847 (1,140 acres), using an estimated 40 million cubic yards of uncontaminated dredged material from maintenance dredging of the southern approach channels of the Baltimore Harbor and Channels navigation project. This will be accomplished through the construction of approximately 35,000 feet of armored dikes to contain the dredged material necessary to form the low and high marsh wetlands and upland habitat and to protect the 1,140-acre dredged material placement area from the severe wave activity in this region of the Chesapeake Bay.

AUTHORIZATION: Water Resources Development Acts of 1996 and 2000.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

INITIAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

		ACCUM PCT. OF EST.		PERCENT	PHYSICAL COMPLETION
SUMMARIZED FINANCIAL DATA		FED COST	STATUS (1 Jan 2004)	COMPLETE	SCHEDULE
Estimated Federal Cost	254,000,000		,		
Estimated Non-Federal Cost: Cash Contributions 45,963,000 Other Costs 38,037,000	84,000,000		Entire Project	55	TBD
Total Estimated Project Cost	338,000,000				

Division: North Atlantic District: Baltimore Poplar Island, Maryland

#### SUMMARIZED FINANCIAL DATA:(CONT'D)

#### PHYSICAL DATA

114,158,000 14,101,000 11,096,000	1/		Earth and rock dikes Wetlands created Uplands created	35,000 feet 570 acres 570 acres
125,254,000		49	·	
15,130,000		55		
113,616,000				
0				
	14,101,000 11,096,000 125,254,000 15,130,000 113,616,000	14,101,000 11,096,000 <u>1/</u> 125,254,000 15,130,000 113,616,000	14,101,000 11,096,000 <u>1/</u> 125,254,000 49 15,130,000 55 113,616,000	14,101,000 Wetlands created 11,096,000 1/ Uplands created 125,254,000 49 15,130,000 55

<sup>1/</sup> Reflects \$3,121,000 reduction assigned as savings and slippage, \$84,000 rescinded in accordance with the FY 04 Energy and Water Development Appropriations Act, and \$200,000 reprogrammed into the project.

JUSTIFICATION: Valuable island habitat at Poplar Island is being lost through erosion. Islands are preferentially selected by many fish and wildlife species as nesting/production areas. The lack of human disturbance and fewer predators make islands more productive. Poplar Island is currently eroding at more than 13 feet per year and would have disappeared by now without the project. The plan to restore the island using uncontaminated dredged material from maintenance dredging of the Baltimore Harbor and Channels navigation project was developed through the cooperative efforts of many state and Federal agencies, as well as private organizations. The Port of Baltimore is rapidly reaching a point where available placement area capacity will be insufficient to meet the port's dredging needs. A disruption in the constant maintenance that is required to keep the Port of Baltimore operational would result in significant adverse effects to both the local and national economy.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Dredging	\$10,570,000
Planning, Engineering, and Design	1,000,000
Construction Management	260,000
Dike and Infrastructure	3,300,000
Total	\$15,130,000

Division: North Atlantic District: Baltimore Poplar Island, Maryland

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal

sponsor must comply with the requirements listed below:

Payments Annual Operation During Maintenance

Construction

and Replacement

and

Reimbursements Costs

Provide lands, easements, and rights-of-way \$ 37,000

Pay 25 percent of the cost allocated to fish & wildlife restoration 83,963,000 440,000

(including \$38,000,000 in credits for in-kind services and materials) and bear all costs of operation, maintenance, repair, rehabilitation

and replacement of fish and wildlife facilities.

Requirements of Local Cooperation

Total Non-Federal Costs \$84,000,000 440,000

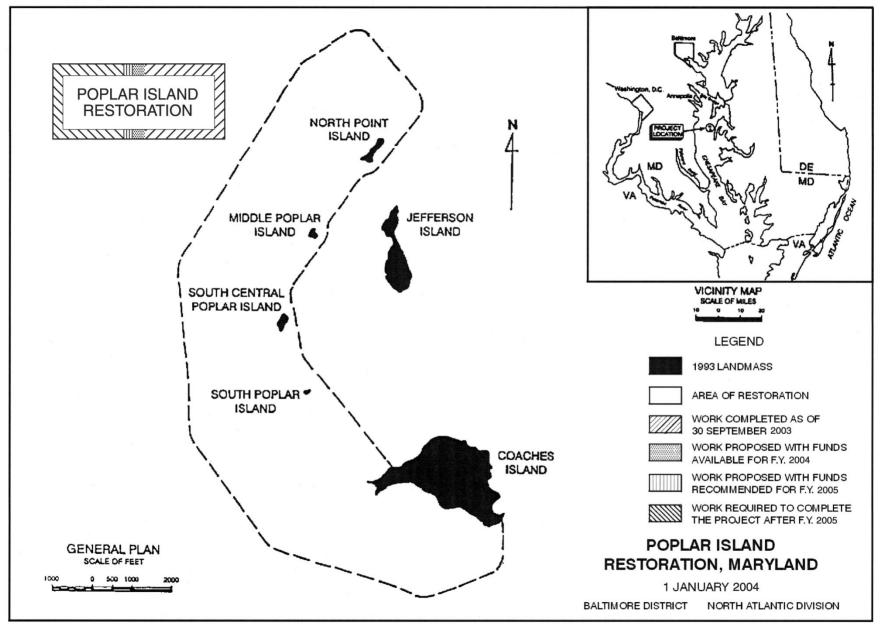
STATUS OF LOCAL COOPERATION: The State of Maryland is the non-Federal sponsor. By letter dated 16 May 1996, the State of Maryland stated its intent to be the non-Federal sponsor and participate in project cost sharing in accordance with the Water Resources Development Act of 1986. The Project Cooperation Agreement was executed in April 1997 and amended 9 April 2002 to reflect in-kind services authorized by the Water Resources Development Act of 2000. To date, the State has fully complied with the local requirements on the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$254,000,000 is the same as the latest estimate (\$254,000,000) presented to Congress (FY 2004).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The EIS was distributed for review and was finalized in February 1996 under the authority of Section 204 of the Water Resources Development Act of 1992.

OTHER INFORMATION: Planning for this project was accomplished under the authority of Section 204 of the Water Resources Development Act of 1992. The feasibility study was initiated in September 1994, completed in February 1996, and approved by the Assistant Secretary of the Army for Civil Works in September 1996. Funds to initiate construction were appropriated in FY 1997.

Division: North Atlantic District: Baltimore Poplar Island, Maryland



APPROPRIATION TITLE: Operation and Maintenance, General, FY 2005

### 1. Navigation

#### a. Channels and Harbors

The budget estimate of \$ 125,180,000 provides for essential operation and maintenance work on 38 channel and harbor projects named in the list which follows. The work to be accomplished under this activity consists of operating and maintaining the coastal navigation channels, harbors and anchorages by means of dredging, constructing bulkheads and dredged material disposal areas, facilities protection, snagging and repairing channel stabilization works, navigation structures, and harbor jetties, all as authorized in the laws pertaining to river and harbor projects.

STATE	ESTIMATED O	BLIGATIONS	Reason for Change and Major Maintenance Items
	FY 2004 (\$)	FY 2005 (\$)	Reason for change in Operations from FY 2004 to
Project Name	<u>Total</u>	<u>Total</u>	FY 2005 (10% +/-)
			Major Maintenance items budgeted in FY 2005
			(Threshold \$ 1,000,000)
		Delaware	
Indian River Inlet and Bay	0	500,000	None.
IWW, from Delaware River	11,335,000	13,800,000	Dredge navigation channel and annual maintenance
to Chesapeake Bay, DE & MD			of navigation facilities.
Wilmington Harbor	3,125,000	3,570,000	Dredge navigation channel; maintain disposal site.
· ·	, ,	, ,	
		Maryland	
Baltimore Harbor and	11,697,000	15,796,000	Dredge navigation channel.
Channels	, ,	, ,	
Wicomico River	988,000	720,000	None.
11100111100 111101	000,000	, 20,000	1101101

APPROPRIATION TITLE: Operation and Maintenance, General FY 2005 (Cont'd)

### 1. Navigation (Cont'd)

## a. Channels and Harbors (Cont'd)

STATE	ESTIMATED OF	BLIGATIONS	Reason for Change and Major Maintenance Items
Project Name	<u>FY 2004 (\$)</u> <u>Total</u>	FY 2005 (\$) Total	Reason for change in Operations from FY 2004 to FY 2005 (10% +/-) Major Maintenance items budgeted in FY 2005 (Threshold \$ 1,000,000)
		Massachusetts	(Till esticite \$ 1,000,000)
Aunt Lydia's Cove	277,000	350,000	None.
Boston Harbor	2,765,000	7,500,000	Dredge navigation channel.
Cape Cod Canal	8,639,000	10,225,000	Annual maintenance of navigation and recreation features and highway and railroad bridges.
Green Harbor	286,000	387,000	None.
		New Jersey	
Cold Spring Inlet	615,000	245,000	None.
Delaware River at Camden	19,000	20,000	None.
Delaware River, Philadelphia to the Sea	17,376,000	20,100,000	Increase in plant rental rates for channel survey. Dredge navigation channel and maintain dredged material disposal site
Delaware River, Philadelphia to Trenton	1,034,000	3,415,000	Increase in plant rental for channel surveys; Dredge navigation channel.
		2 February 2004	

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2005 (Cont'd)

### 1. Navigation (Cont'd)

## a. Channels and Harbors (Cont'd)

<u>STATE</u>	ESTIMATED OB	LIGATIONS	Reason for Change and Major Maintenance Items
Draiget Name	<u>FY 2004 (\$)</u>	FY 2005 (\$)	Reason for change in Operations from FY 2004 to
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	FY 2005 (10% +/-) Major Maintenance items budgeted in FY 2005 (Threshold \$ 1,000,000)
		New Jersey (Cont'd)	
Manasquan River	162,000	190,000	None.
Newark Bay, Hackensack, & Passaic Rivers	93,000	120,000	None.
Shark River	64,000	100,000	None.
		New York	
Browns Creek	74,000	750,000	None.
Buttermilk Channel	277,000	1,030,000	Dredge navigation channel.
East River	0	370,000	None.
East Rockaway Inlet	129,000	2,100,000	Dredge navigation channel.
Fire Island Inlet to Jones Inlet	2,602,000	180,000	None.

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2005 (Cont'd)

### 1. Navigation (Cont'd)

### a. Channels and Harbors (Cont'd)

STATE	ESTIMATED OB	LIGATIONS	Reason for Change and Major Maintenance Items
Project Name	<u>FY 2004 (\$)</u> <u>Total</u>	<u>FY 2005 (\$)</u> <u>Total</u>	Reason for change in Operations from FY 2004 to FY 2005 (10% +/-) Major Maintenance items budgeted in FY 2005 (Threshold \$ 1,000,000)
		New York (Cont'd)	
Hudson River (Maintenance)	2,313,000	2,005,000	Dredge navigation channel
Hudson River (O&C)	1,401,000	1,950,000	
Jamaica Bay	129,000	2,200,000	Dredge navigation channel.
Lake Montauk Harbor	70,000	750,000	None.
Moriches Inlet	823,000	50,000	None.
New York and New Jersey Channels	3,074,000	4,940,000	Dredge navigation channel.
New York Harbor	4,111,000	4,235,000	Dredge navigation channel.
Saugerties Harbor	0	500,000	None.
Shinnecock Inlet	2,400,000	100,000	None.

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2005 (Cont'd)

- 1. Navigation (Cont'd)
  - a. Channels and Harbors (Cont'd)

STATE	ESTIMATED OBI	LIGATIONS	Reason for Change and Major Maintenance Items
D : (N	FY 2004 (\$)	FY 2005 (\$)	Reason for change in Operations from FY 2004 to
Project Name	<u>Total</u>	<u>Total</u>	FY 2005 (10% +/-) Major Maintenance items budgeted in FY 2005
			(Threshold \$ 1,000,000)
		Pennsylvania	
Schuylkill River	952,000	1,480,000	Dredge navigation channel.
		Rhode Island	
Providence River & Harbor	17,857,000	9,000,000	Dredge navigation channel.
		Vermont	
Narrows of Lake Champlain	46,000	50,000	None.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2005 (Cont'd)

- 1. Navigation (Cont'd)
  - a. Channels and Harbors (Cont'd)

<u>STATE</u>	ESTIMATED O	BLIGATIONS	Reason for Change and Major Maintenance Items
	FY 2004 (\$)	FY 2005 (\$)	Reason for change in Operations from FY 2004 to
Project Name	<u>Total</u>	<u>Total</u>	FY 2005 (10% +/-)
			Major Maintenance items budgeted in FY 2005 (Threshold \$ 1,000,000)
			(Tilleshold \$ 1,000,000)
			<del></del>
		Virginia	
Atlantic Intracoastal Waterway (ACC)	1,885,000	1,934,000	Operate bridge, road and locks.
Atlantic Intracoastal Waterway (DSC)	905,000	435,000	Reduction in lock and spillway operation.
James River Channel	2,414,000	3,770,000	Dredge navigation channel.
Lynnhaven Inlet	184,000	1,635,000	Dredge navigation channel.
Norfolk Harbor	9,659,000	8,678,000	Dredge navigation channel, raise
			dikes and levees at Craney Island
Other Projects Maintained Periodically	33,110,000	0	
Total-Channels & Harbors	142,890,000	125,180,000	
b. Locks and Dams: NONE			
5. Locks and Dams. NONE			
TOTAL NAVIGATION	440,000,000	405 400 000	
TOTAL NAVIGATION	142,890,000	125,180,000	
		0 = 1	

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2005 (Cont'd)

#### 2. Flood Control

#### a. Reservoirs

The budget estimate of \$41,472,000 provides for the operation of 51 flood control reservoirs. Requirements include: operation and ordinary maintenance of project facilities, facility security; labor, supplies, materials, and parts for day-to-day functioning; periodic maintenance, repairs and replacements; and contract law enforcement. The requested amount also includes application of special recreation use fees for recreation areas.

STATE	ESTIMATED OB	LIGATIONS	Reason for Change and Major Maintenance Items
Project Name	<u>FY 2004 (\$)</u> <u>Total</u>	<u>FY 2005 (\$)</u> <u>Total</u>	Reason for change in Operations from FY 2004 to FY 2005 (10% +/-) Major Maintenance items budgeted in FY 2005
			(Threshold \$ 1,000,000)
		Connecticut	
Black Rock Lake	438,000	414,000	None.
Colebrook River Lake	544,000	541,000	None.
Hancock Brook Lake	259,000	288,000	None.
Hop Brook Lake	942,000	985,000	None.
Mansfield Hollow Lake	445,000	585,000	Perform periodic inspections.
Northfield Brook Lake	332,000	416,000	Perform periodic inspections of bridges.
Thomaston Dam	538,000	616,000	Reduction in natural resources management activities in FY04.
West Thompson Lake	526,000	575,000	None.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2005 (Cont'd)

## 2. Flood Control (Cont'd)

## a. Reservoirs (Cont'd)

STATE	ESTIMATED OBL	IGATIONS	Reason for Change and Major Maintenance Items
Project Name	<u>FY 2004 (\$)</u> <u>Total</u>	<u>FY 2005 (\$)</u> <u>Total</u>	Reason for change in Operations from FY 2004 to FY 2005 (10% +/-) Major Maintenance items budgeted in FY 2005 (Threshold \$ 1,000,000)
		Maryland	
Jennings Randolph Lake	2,780,000	2,662,000	None.
		Massachusetts	
Barre Falls Dam	558,000	680,000	Perform periodic inspections in FY05.
Birch Hill Dam	473,000	585,000	Perform periodic inspection of bridges in FY05.
Buffumville Lake	453,000	601,000	Perform periodic inspections in FY05.
Charles River Natural Valley Storage Area	269,000	310,000	None.
Conant Brook Lake	185,000	211,000	None.
East Brimfield Lake	368,000	461,000	Perform periodic inspections in FY05.
Hodges Village Dam	476,000	646,000	Perform periodic inspections in FY05.
	2	February 2004	

APPROPRIATION TITLE: Operation and Maintenance, General FY 2005 (Cont'd)

## 2. Flood Control (Cont'd)

## a. Reservoirs (Cont'd)

<u>STATE</u>	ESTIMATED OBL	IGATIONS	Reason for Change and Major Maintenance Items
Ducie et Nove	FY 2004 (\$)	FY 2005 (\$)	Reason for change in Operations from FY 2004 to
Project Name	<u>Total</u>	<u>Total</u>	FY 2005 (10% +/-) Major Maintenance items budgeted in FY 2005
			(Threshold \$ 1,000,000)
			<del>-</del>
	М	assachusetts (Con	t'd)
Knightville Dam	513,000	559,000	None.
Littleville Lake	444,000	498,000	Reduction in natural resources management activities in FY04.
Tully Lake	482,000	564,000	Reduction in natural resources management activities in FY04.
West Hill Dam	646,000	736,000	None.
Westville Lake	434,000	569,000	Reduction in natural resources management activities in FY04.
		New Hampshire	
		•	
Blackwater Dam	467,000	617,000	Perform increased dam operation activities and inspections for Environmental and Real Estate compliance.
Edward MacDowell Lake	528,000	527,000	None.
Franklin Falls Dam	617,000	722,000	None.
	2	February 2004	139

APPROPRIATION TITLE: Operation and Maintenance, General FY 2005 (Cont'd)

## 2. Flood Control (Cont'd)

## a. Reservoirs (Cont'd)

<u>STATE</u>	ESTIMATED OBL		Reason for Change and Major Maintenance Items
Duning of Name	<u>FY 2004 (\$)</u>	FY 2005 (\$)	Reason for change in Operations from FY 2004 to
Project Name	<u>Total</u>	<u>Total</u>	FY 2005 (10% +/-) Major Maintenance items budgeted in FY 2005
			(Threshold \$ 1,000,000)
	Ne	ew Hampshire (Cont	ľd)
Hopkinton-Everett Lakes	1,079,000	1,175,000	None.
Otter Brook Lake	624,000	648,000	None.
Surry Mountain Lake	585,000	639,000	None.
		New York	
Almond Lake	440,000	530,000	Perform periodic inspections in FY05.
Arkport Dam	257,000	283,000	None.
East Sidney Lake	469,000	466,000	None.
Whitney Point Lake	555,000	577,000	None.
		Pennsylvania	
Alvin R. Bush Dam	666,000	614,000	None.
Aylesworth Creek Lake	238,000	204,000	None.
	2	February 2004	

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APPROPRIATION TITLE: Operation and Maintenance, General FY 2005 (Cont'd)

### 2. Flood Control (Cont'd)

### a. Reservoirs (Cont'd)

STATE	ESTIMATED O	BLIGATIONS	Reason for Change and Major Maintenance Items
Project Name	<u>FY 2004 (\$)</u> <u>Total</u>	<u>FY 2005 (\$)</u> <u>Total</u>	Reason for change in Operations from FY 2004 to FY 2005 (10% +/-) Major Maintenance items budgeted in FY 2005 (Threshold \$ 1,000,000)
		Pennsylvania (Cont'o	d)
Beltzville Lake	947,000	906,000	None.
Blue Marsh Lake	2,235,000	2,355,000	None.
Cowanesque Lake	1,981,000	2,010,000	None.
Curwensville Lake	695,000	716,000	None.
Foster Joseph Sayers Dam	738,000	758,000	None.
Francis E. Walter Dam	2,795,000	617,000	Construct road relocation in FY04.
General Edgar Jadwin Dam and Reservoir	273,000	231,000	None.
Prompton Lake	426,000	399,000	None.
Raystown Lake	4,184,000	4,078,000	None.
Stillwater Lake	360,000	378,000	None.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2005 (Cont'd)

## 2. Flood Control (Cont'd)

## a. Reservoirs (Cont'd)

<u>STATE</u>	ESTIMATED OB	BLIGATIONS	Reason for Change and Major Maintenance Items
	FY 2004 (\$)	FY 2005 (\$)	Reason for change in Operations from FY 2004 to
Project Name	<u>Total</u>	<u>Total</u>	FY 2005 (10% +/-)
			Major Maintenance items budgeted in FY 2005 (Threshold \$ 1,000,000)
			(Tilleshold \$ 1,000,000)
		Pennsylvania (Cont'd	1)
Tioga-Hammond Lakes	3,137,000	2,642,000	Perform design and construct Lambs Creek access road.
York Indian Rock Dam	646,000	538,000	Perform periodic inspections and sediment survey in FY04.
		Vermont	
Ball Mountain Lake	826,000	789,000	None.
North Hartland Lake	1,558,000	659,000	Construct visitor center in FY04.
North Springfield Lake	712,000	849,000	None.
Townshend Lake	714,000	759,000	None.
Union Village Dam	634,000	602,000	None.
		Virginia	
Gathright Dam and Lake Moomaw	1,642,000	1,682,000	None.
Total reservoirs	43,133,000	41,472,000	
		2 Fobrus 2004	

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2005 (Cont'd)

- 2. Flood Control (Cont'd)
  - a. Reservoirs (Cont'd)

### **Scheduling Reservoir Operations**

The **\$150,000** requested in FY 2005 supports preparation, review and updating of water control manuals, real-time data collection to monitor hydrologic conditions, and the issuance of gate regulation instructions as necessary at **2** non-Corps dam and reservoir projects at which the Corps is responsible for flood control or navigation.

STATE	ESTIMATED OBL	IGATIONS	Reason for Change and Major Maintenance Items
	FY 2004 (\$)	FY 2005 (\$)	Reason for change in Operations from FY 2004 to
Project Name	<u>Total</u>	<u>Total</u>	FY 2005 (10% +/-)
			Major Maintenance items budgeted in FY 2005 (Threshold \$ 1,000,000)
			(Tilleshold \$ 1,000,000)
Maryland	110,000	95,000	None.
Pennsylvania	53,000	55,000	None.
Total Scheduling of	163,000	150,000	
Reservoir Operations	,	,	
Total Reservoirs and	43,296,000	41,622,000	
Scheduling of	, ,,,,,,,,	, ,	
Reservoir Operations			

APPROPRIATION TITLE: Operation and Maintenance, General FY 2005 (Cont'd)

### 2. Flood Control (Cont'd)

### b. Channel Improvements

The budget estimate of **\$2,419,000** provides for the essential annual requirement of 4 local flood protection projects, including **10** separate units of the Southern New York projects.

STATE	ESTIMATED OB	LIGATIONS	Reason for Change and Major Maintenance Items
Project Name	<u>FY 2004 (\$)</u> <u>Total</u>	<u>FY 2005 (\$)</u> <u>Total</u>	Reason for change in Operations from FY 2004 to FY 2005 (10% +/-) Major Maintenance items budgeted in FY 2005 (Threshold \$ 1,000,000)
		Connecticut	
Stamford Hurricane Barrier	337,000	456,000	Periodic inspections in FY05.
		Massachusetts	
New Bedford, Fairhaven & Acushnet Hurricane Barrier	605,000	750,000	None.
		New Jersey	
Passaic River Flood Flood Warning System	425,000	425,000	None.
		New York	
Southern New York Projects	724,000	788,000	None.
Total Channel Improvements	2,091,000	2,419,000	

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2005 (Cont'd)

### 2. Flood Control (Cont'd)

#### b. Channel Improvements (Cont'd)

### Inspection of Completed Works and Miscellaneous Maintenance

The \$ 967,000 requested in FY 2005 supports inspections at flood control projects constructed by the Corps and operated and maintained by non-Federal interests. The inspections are conducted to determine the extent of compliance with legal standards and to advise local interests, as necessary, of corrective measures required to ensure that project structures and facilities will continue to safely provide flood protection benefits. These projects consist of features such as channels, levees, and floodwalls. drainage structures and pumping plants.

STATE	ESTIMATED O		Reason for Change and Major Maintenance Items
Project Name	<u>FY 2004 (\$)</u> <u>Total</u>	<u>FY 2005 (\$)</u> <u>Total</u>	Reason for change in Operations from FY 2004 to FY 2005 (10% +/-)  Major Maintenance items budgeted in FY 2005 (Threshold \$ 1,000,000)
Connecticut	76,000	36,000	Decrease in projects to be inspected.
Maine	16,000	11,000	Decrease in projects to be inspected.
Massachusetts	107,000	114,000	None.
New Hampshire	11,000	12,000	None.
New Jersey	96,000	40,000	Decrease in projects to be inspected.
New York	259,000	442,000	Increase in projects to be inspected.
Pennsylvania	146,000	4,000	Decrease in projects to be inspected.
Rhode Island	6,000	10,000	Increase in projects to be inspected.

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2005 (Cont'd)

- 2. Flood Control (Cont'd)
  - **b. Channel Improvements** (Cont'd)

### Inspection of Completed Works and Miscellaneous Maintenance (continued)

STATE	ESTIMATED OB	LIGATIONS	Reason for Change and Major Maintenance Items
Project Name	FY 2004 (\$) Total	<u>FY 2005 (\$)</u> <u>Total</u>	Reason for change in Operations from FY 2004 to FY 2005 (10% +/-) Major Maintenance items budgeted in FY 2005 (Threshold \$ 1,000,000)
			(TITICSHOID & 1,000,000)
Vermont	40,000	42,000	None.
Virginia	104,000	176,000	Increase in projects to be inspected.
West Virginia	20,000	80,000	Increase in projects to be inspected.
Total Inspection and Miscellaneous Maintenance	881,000	967,000	
Total Channel Improvements, Inspections and Miscellaneous Maintenance	2,972,000	3,386,000	
TOTAL-FLOOD CONTROL	46,268,000	45,008,000	

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2005 (Cont'd)

### 3. Multiple Purpose Power Projects - NONE

### 4. Protection of Navigation

The budget estimate of **\$9,796,000** provides for accomplishing the work essential to the administration and enforcement of specific laws enacted for the protection of navigation, including the prevention of obstructive and injurious deposits in the tidal waters of three major harbors; removal of drift and debris.

STATE	ESTIMATED OF	BLIGATIONS	Reason for Change and Major Maintenance Items
Project Name	<u>FY 2004 (\$)</u> <u>Total</u>	<u>FY 2005 (\$)</u> <u>Total</u>	Reason for change in Operations from FY 2004 to FY 2005 (10% +/-) Major Maintenance items budgeted in FY 2005 (Threshold \$ 1,000,000)
Prevention of Obstructive and Injurious Deposit	ts:		
Baltimore Harbor, MD	632,000	700,000	None.
New York Harbor, NY & NJ	701,000	760,000	None.
Norfolk Harbor, VA	187,000	190,000	None.
Collection and Removal of Drift:			
Baltimore Harbor Drift Removal, MD	469,000	510,000	None.
New York Harbor Drift Removal, NY & NJ	4,998,000	5,414,000	None.
Potomac and Anacostia River Drift Removal, DC	1,029,000	1,122,000	None.
Hampton Roads Drift Removal, VA	1,122,000	1,100,000	None.
Total Protection of Navigation	9,138,000	9,796,000	

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**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2005 (Cont'd)

### 4. Protection of Navigation (Cont'd)

### a. Project Condition Surveys

The \$11,783,000 requested in FY 2005 supports hydrographic surveys, inspections, and studies to determine the condition of navigation channels that do not have any other maintenance work included in the budget request and disseminate the information to users of the projects. For the projects that do not require maintenance, surveys are performed at many of them in order to determine the degree of sedimentation so that the users can be advised of channel conditions and future maintenance can be scheduled.

STATE	ESTIMATED OB	LIGATIONS	Reason for Change and Major Maintenance Items
Project Name	<u>FY 2004 (\$)</u> <u>Total</u>	<u>FY 2005 (\$)</u> <u>Total</u>	Reason for change in Operations from FY 2004 to FY 2005 (10% +/-) Major Maintenance items budgeted in FY 2005 (Threshold \$ 1,000,000)
Connecticut	1,219,000	1,486,000	Variation in survey requirements.
Treatment of Dredged Material LIS, CT	101,000	1,500,000	Perform demonstration project in FY05.
Delaware	51,000	80,000	Variation in survey requirements.
District of Columbia	33,000	36,000	None.
Maine	530,000	646,000	Variation in survey requirements.
Disposal Area Monitoring, ME	1,234,000	1,390,000	None.
Maryland	341,000	372,000	None.
Massachusetts	1,231,000	1,511,000	None.
New Hampshire	281,000	343,000	None.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2005 (Cont'd)

## 4. Protection of Navigation (Cont'd)

### a. Project Condition Surveys (Cont'd)

STATE	ESTIMATED OB	LIGATIONS	Reason for Change and Major Maintenance Items
Project Name	<u>FY 2004 (\$)</u> <u>Total</u>	<u>FY 2005 (\$)</u> <u>Total</u>	Reason for change in Operations from FY 2004 to FY 2005 (10% +/-) Major Maintenance items budgeted in FY 2005
			(Threshold \$ 1,000,000)
New Jersey	734,000	1,670,000	Variation in survey requirements.
New York	870,000	1,075,000	Variation in survey requirements.
Rhode Island	223,000	414,000	Variation in survey requirements.
Rhode Island Region Long-Term Dredge Disposal Evaluation	1,800,000	500,000	Evaluation to be completed in mid-FY05.
Virginia	702,000	760,000	None.
Total Project Condition Survey	9,350,000	11,783,000	

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2005 (Cont'd)

### 4. Protection of Navigation (Cont'd)

### b. Surveillance of Northern Boundary Waters.

The **\$17,000** requested in FY 2005 supports meeting US obligations under provisions of boundary water treaties and other international agreements. Data collection includes current velocity measurements, presence and intensity of ice, water levels, land use patterns and estimating potential damages caused by extreme levels. This information can be used to enhance water level forecasts, develop crises response plans, and provide advance warning to area residents and waterway users of impending floods or ice jams.

STATE	ESTIMATED OF	BLIGATIONS	Reason for Change and Major Maintenance Items
Project Name	FY 2004 (\$) Total	<u>FY 2005 (\$)</u> <u>Total</u>	Reason for change in Operations from FY 2004 to FY 2005 (10% +/-) Major Maintenance items budgeted in FY 2005
- <del></del>			(Threshold \$ 1,000,000)
		Maine	
International St. Croix River Board	17,000	17,000	None.
Total Surveillance of Northern Boundary Waters	17,000	17,000	
Total Protection of Navigation Project Condition Survey & Surveillance of Northern Boundary Waters	18,505,000	21,596,,000	
GRAND TOTAL-NORTH ATLANTIC DIVISION	207,663,000	191,784,000	